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# METROPOLITAN DISTRICT COMMISSION
# DIVISION OF WATERSHED MANAGEMENT
# QUABBIN SECTION

# 1997 WATER QUALITY REPORT

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*ACKNOWLEDGMENTS*

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## 1.0 EXECUTIVE SUMMARY

This report presents 1997 water quality data for monitoring conducted on Quabbin Reservoir and tributaries including those within the Ware River watershed. Data includes results of physical, biological, and chemical analysis of routine sampling at thirty six stations representative of water entering and leaving the Quabbin Reservoir.

Throughout 1997, raw water leaving the reservoir via the Chicopee Valley Aqueduct and Shaft 12 intake met all criteria established under the Massachusetts Department of Environmental Protection/Federal Environmental Protection Agency (DEP/EPA) surface water filtration waiver. The DEP/EPA requires that prior to disinfection, 90% of water samples collected over a six month period must maintain a fecal coliform concentration equal to or less than 20 colonies per 100 milliliters (ml). In addition, turbidity levels are not allowed to exceed 1 Nephelometric Turbidity Unit (NTU). On April 3, following two consecutive days of very strong, (20-30 mph sustained) north winds, fecal coliform levels measured daily at the CVA peaked at 16 colonies per 100 ml. During a month of sporadically elevated fecal coliform levels recorded weekly at the Shaft 12 shoreline site, levels peaked at 11 colonies on June 30. Reservoir turbidity levels measured weekly from both the shoreline at Shaft 12 and inside the power station on the CVA service line remained consistently well below the 1 NTU standard, averaging 0.3 NTU. Turbidity levels peaked at 0.4 NTU at the CVA sample site during the first week of September during an apparent mini algae bloom. Levels also peaked at 0.4 NTU at the Shaft 12 site on June 23 and December 1.

There were no water diversions from the Ware River watershed during 1997. Source water quality measured bi-weekly from Shaft 8 intake in Barre showed that average fecal coliform and turbidity levels during the allowable diversion period were at 4 colonies/100 ml and 0.7 NTU respectively.

In addition to determining compliance with source water criteria, the water quality data contained within this report is used to monitor trends and changes resulting from outside environmental factors, guide watershed management activities, and identify potential pollution problems at early stages. Contained within this report is a general description of the Quabbin Reservoir supply and its relation to the Wachusett Reservoir and Ware River watershed, a discussion on the water quality sampling program conducted throughout the Quabbin and Ware River watersheds, and a summary of special water quality investigations conducted during the past year.

## 2.0 INTRODUCTION - QUABBIN RESERVOIR AND THE WATERSHED SYSTEM

Figure 1 shows the Quabbin, Ware River and Wachusett watershed system that supplies drinking water to Boston and 46 other member communities that make up the Massachusetts Water Resources Authorities service territory. The largest of the three interconnected sources is Quabbin Reservoir, a 412 billion gallon impoundment of the Swift River located in Central Massachusetts. Quabbin transfers to Wachusett Reservoir via the Quabbin Aqueduct Intake at Shaft 12 typically account for more than half of MWRA's system supply. Quabbin Reservoir also supplies a much smaller amount of water directly to three western Massachusetts communities via the Chicopee Valley Aqueduct (CVA). Water is delivered via two aqueduct systems whose intake structures are depicted in Figure 1. The intake at Shaft 12 is located mid reservoir along the eastern shoreline in Hardwick and the CVA intake lies at the base of Winsor Dam in Belchertown. Quabbin Reservoir has maintained a "filtered waiver" status for its CVA supply since 1992. A filtered waiver status for Wachusett Reservoir is pending further review by the State Department of Environmental Protection and Federal Environmental Protection Agency. The Ware River watershed serves as a supplemental supply to the Quabbin Reservoir. Waters from Ware River are diverted into the Quabbin Aqueduct at Shaft 8 in Barre and directed west towards Quabbin via gravity flow. Diversions are limited to periods when Ware River flows exceed 85 MGD and require DEP approval unless conducted during the allowable diversion period from October 15 to June 15. The focus of this report is the Quabbin watershed and supplemental supplies from Ware River diversions.

Quabbin watershed is about 19 miles long, 13 miles wide, and contains roughly 120,000 acres. More than 90% of watershed lands are forested and the Metropolitan District Commission owns and controls 53,000 acres (55%) for watershed protection. The majority of non-MDC owned lands is maintained as private forest. Developed lands can be characterized by low density residential and limited agricultural sites.

The Ware River watershed is about 11 miles long, 7 miles wide, and contains roughly 62,000 acres. Nearly 75% of the lands are forested and the Metropolitan District Commission owns and controls 22,000 acres (35%) for watershed protection. Like Quabbin, the vast majority of private lands are maintained as forests and developed lands consist primarily of low density residential and agricultural sites.

No wastewater treatment plant discharges are currently permitted in tributaries to either of the three sources, and, industrial and commercial sites throughout the three watersheds are limited.

Annual precipitation data collected from 1930 to 1997 averaged 46.27 inches, as measured in Belchertown at the MDC maintained Administration Building gauging site. Precipitation is typically distributed equally throughout the year. In 1997, the precipitation total of 43.80 inches was only slightly below the 67 year average. Monthly precipitation totals fell slightly below average in seven months throughout the year. Only during September was there a truly "dry" period when rainfall totals were 3 inches below average. Those "wet" months in which totals fell above average were March, July, August and November. Most notable, two storm events occurred in July that dumped up to or above 2 inches of rain over a course of 24 hours. The effects of the unusually wet year in 1996 could still be felt in 1997 as water was discharged over the reservoir spillway for a period of 203 consecutive days starting January 1 and ending July 22.

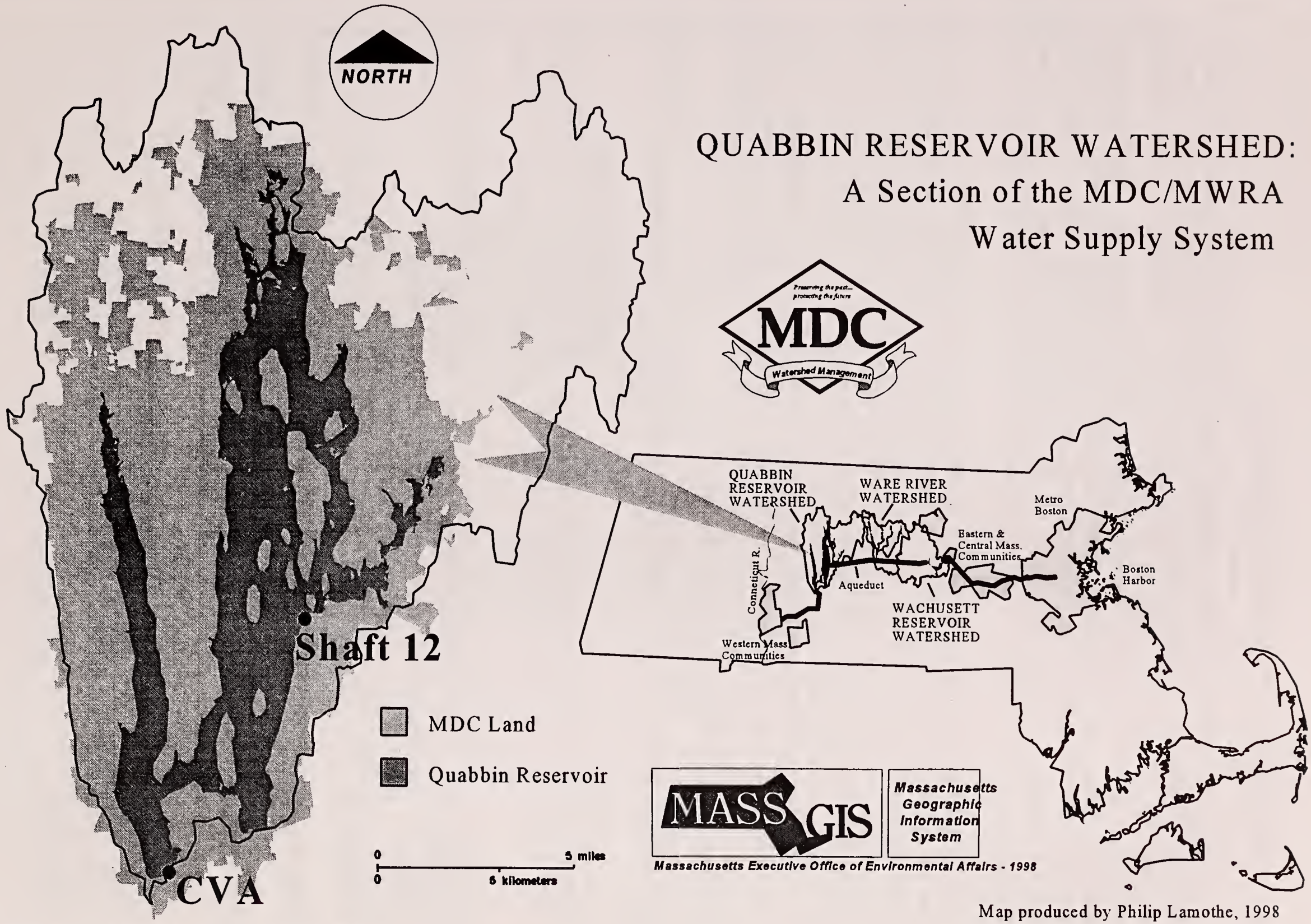


**Figure 1** - MDC Watershed System Map

## 3.0 WATER QUALITY SAMPLING PROGRAM

Grab samples are collected routinely throughout the year at the start of each work week. Sample collection is generally performed regardless of weather conditions, thereby providing a good representation of various flow conditions and pollutant loadings. All sample site locations, sampling frequencies, and methodologies remained unchanged from the previous year. A total of twenty streams and seven ponds located throughout the two watersheds, and five sites located on or representing water withdrawn from the reservoir were routinely sampled to characterize the quality of water entering and leaving the reservoir. Tables 2a and 2b list tributary sampling sites with drainage area attributes for each of the two watersheds. Table 1 contains a listing of reservoir sampling stations with site characteristics.

For most parameters, analysis is performed in-house by Quabbin Laboratory staff. Laboratory analysis on each tributary sample site includes a bi-monthly test for total and fecal coliform, alkalinity, pH, specific conductance and turbidity. Analysis is also performed quarterly for color, chloride, hardness, total and fixed solids, and iron. Temperature and dissolved oxygen levels are determined in the field during grab sampling, using a YSI Model 57 dissolved oxygen meter. Throughout April thru November, laboratory staff utilized a hydrolab surveyor II field instrument to determine monthly reservoir depth profiles for temperature, pH, dissolved oxygen, and specific conductance. Revet Laboratory in Framingham, Massachusetts provided contract laboratory services to perform nutrient, metal and volatile organic compound analysis of special sampling. Listed below are methods utilized for laboratory analysis and sampling techniques.

QUABBIN LABORATORY METHODS USED FOR FIELD AND LABORATORY ANALYSIS

| PARAMETER | STANDARD METHOD |
|---|---|
| Turbidity | SM 2130B |
| pH | SM 4500-H+ B<br>Hydrolab Surveyor II<br>Orion 811 meter |
| Alkalinity | SM 2320 B (low level) |
| Chloride | SM 4500-Cl C |
| Hardness | SM 2340 C |
| Color | SM 2120 B |
| Conductivity | HACH DREL/5 meter<br>Hydrolab Surveyor II |
| Temperature | YSI Model 57 DO meter<br>Hydrolab Surveyor II |
| Dissolved Oxygen | YSI Model 57 DO meter<br>Hydrolab Surveyor II |
| Iron | HACH DR/3<br>Spectrophotometer |
| Total Solids | SM 2540 B |
| Fixed Solids | SM 2540 E |
| Total Coliform | SM 9222B |
| Fecal Coliform | SM 9222 D |

| Table 1 - 1997 Quabbin Reservoir Sample Stations | | | |
|---|---|---|---|
| Station | Location | Universal Transverse Mercator (UTM) Coordinates* | Frequency |
| (201) CVA Outlet | Winsor Power Station, bldg. tap | 130448.40, 892497.60 | Daily - Constitutes AM collection Monday thru Thursday. Sampling is increased with an additional PM sample collected seven days a week during phases of the *Gull Control Program.* |
| (206) Shaft 12 shoreline | Shoreline beside Shaft 12 intake building | 135866.90, 902601.20 | Weekly |
| Shaft 11A | Quabbin Aqueduct outlet on Quabbin shoreline, east of baffle dams. | 139244.40, 902997.10 | Weekly during Ware River diversions. |
| QR01/202 CVA Intake | Quabbin west arm off of Winsor Dam | 129908.40, 893432.60 | Monthly** |
| QR06/206 | At site of old Quabbin Lake, off shore of Shaft 12 | 135308.80, 902472.80 | Monthly** |
| QR10/Den Hill | North of Den Hill | 136910.90, 904555.50 | Monthly** |

*** UTM coordinates referenced using NAD 27.**

**** In 1997, depth and temperature profiles were determined at these sites during the months of April through November.**

# QUABBIN RESERVOIR WATERSHED:

# 1997 Water Quality Sample Sites

Metropolitan District Commission –Division of Watershed Management

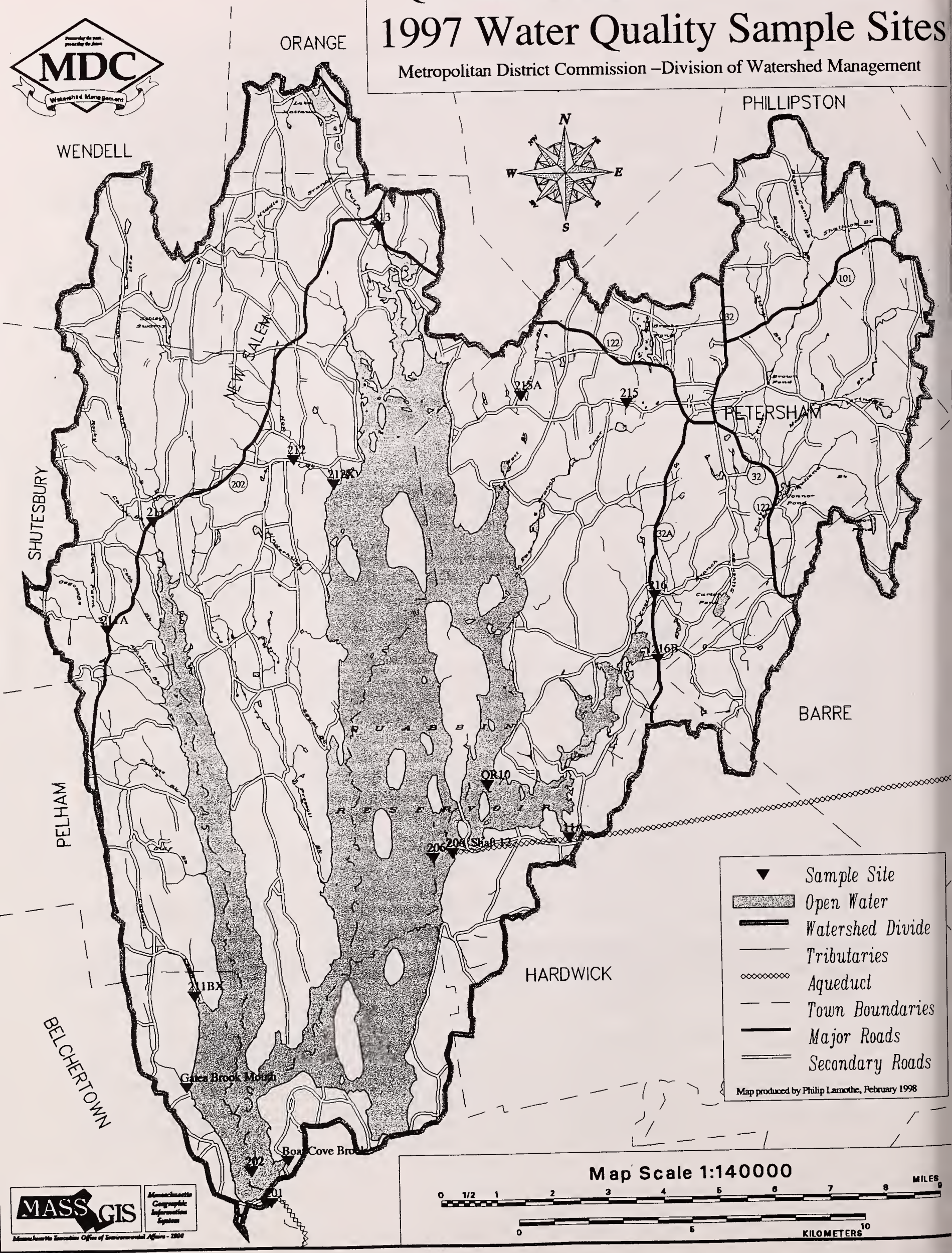

**Table 2a - 1997 Quabbin Tributary Sampling Stations**

| Station | Location | Universal Transverse Mercator (UTM) Coordinates | Frequency | Drainage Area (sq. mi.) | MDC Owned Land (%) | Wetland Composition (%) |
|---|---|---|---|---|---|---|
| (216) East Branch Swift River | Rt. 32A, 3.7 mi. upstream mouth | 141825.60, 909967.70 | BM | 30.3 | 1.67 | 10.4 |
| (211) West Branch Swift River | Rt. 202, 1.6 mi. upstream mouth | 127414.20, 912291.60 | BM | 12.4 | 33 | 3.43 |
| (213) Middle Branch Swift River | Gate 30, 1.6 mi. upstream mouth | 134058.40, 920708.30 | BM | 9.14 | 22.7 | 8.14 |
| (212X) Hop Brook | At mouth. | 132643.10, 913297.80 | BM | 5.43 | 44.8 | 2.7 |
| (212) Hop Brook | Gate 22, 0.9 mi. upstream mouth. | 131492.30, 914020.10 | BM | 4.52 | 32 | -- |
| (215) East Branch Fever Brook | West St., 4.2 mi. upstream mouth | 141102.90, 915522.60 | BM | 4.15 | 12.3 | 11.45 |
| (215A) West Branch Fever Brook | Womens Fed.<br>1.7 mi. upstream mouth | 138056.80, 915770.90 | BM | 2.69 | 18.4 | 8.9 |
| (211BX) Cadwell Creek | At mouth | 128356.80, 898548.60 | BM | 2.59 | 98 | 3.27 |
| (216B) Rand Brook | Rt. 32A, 0.3 mi. upstream mouth | 141890.90, 908130.80 | BM | 2.42 | 22.7 | -- |
| (211A) Atherton Brook | Rt. 202, 1.4 mi. upstream mouth | 126053.10, 909179.40 | BM | 1.83 | 36 | 3.24 |
| Gates Brook | Gate 5 at mouth | 128076.40, 895894.60 | BM | 0.93 | 100 | 2.96 |
| Boat Cove Tributary | At mouth | 130959.40, 893716.20 | BM | 0.15 | 100 | <<1 |

Frequency: BM = bimonthly

*UTM coordinates referenced using North American Datum (NAD) 27.

# WARE RIVER WATERSHED:

# 1997 Water Quality Sample Sites

Metropolitan District Commission –Division of Watershed Management

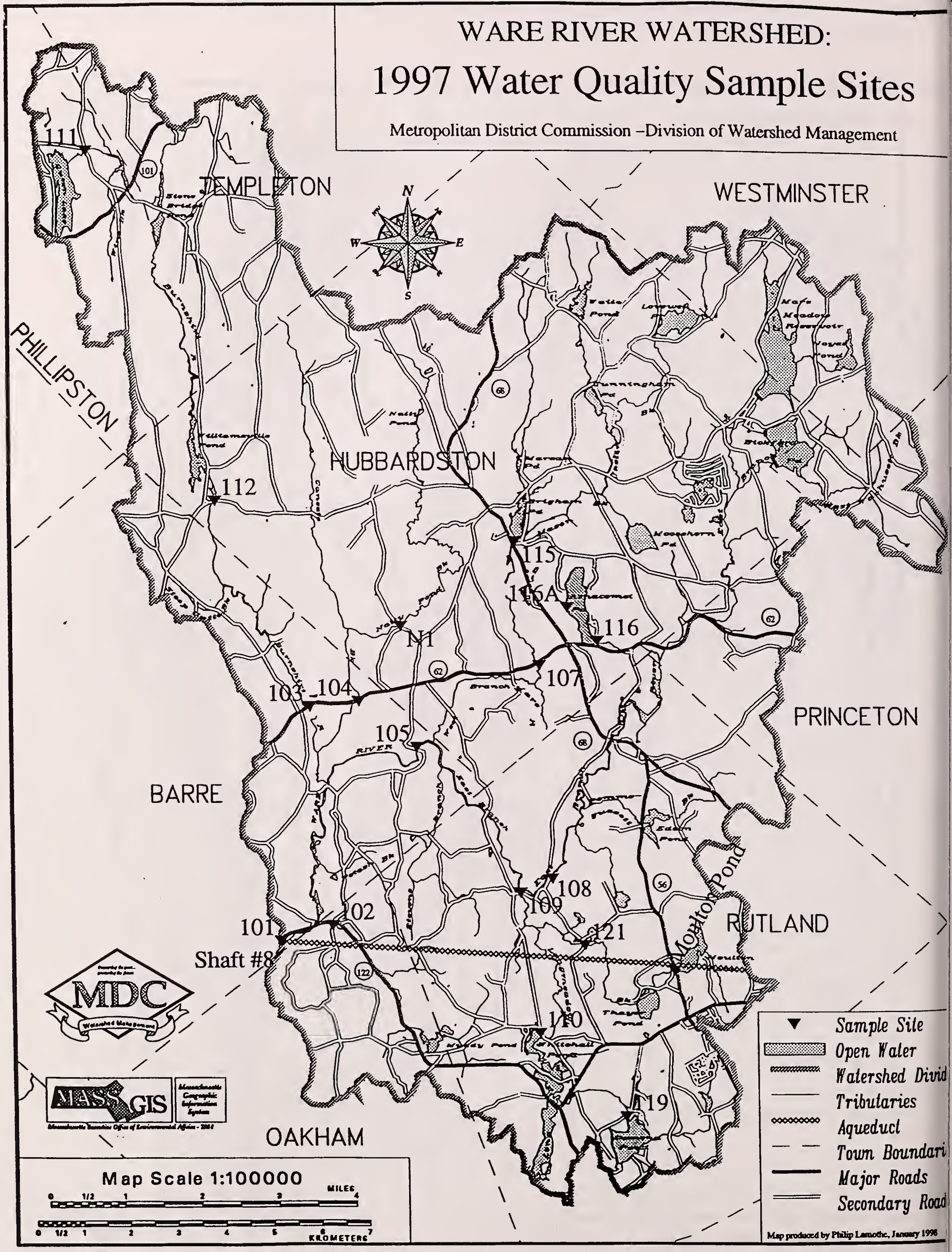

**Table 2b - 1997 Ware River Tributary Sampling Stations**

| Station | Location | Universal Transverse Mercator (UTM) Coordinates* | Frequency | Drainage Area (sq. mi.) | MDC Owned Land (%) | Wetland Composition (%) |
|---|---|---|---|---|---|---|
| (111) Queen Lake | Road culvert | 737314.72, 4713853.18 | BM | 0.71 | 0 | 36.8 |
| (112) Burnshirt River | Williamsville | 740302.75, 4706499.91 | BM | 11.38 | 2.5 | 14.5 |
| Natty Pond Brook | Hale Road | 744271.18, 4703993.42 | BM | 5.49 | 33.2 | 14.0 |
| (104) Canesto & Natty Brooks | Rt. 62 | 743438.48, 4702349.34 | BM | 12.71 | 28.0 | 8.7 |
| (103) Burnshirt River** | Rt. 62 | 742417.41, 4702189.75 | BM | 18.44 | 23.5 | 11.7 |
| Ware River | Shaft 8 | 741974.88, 4697138.30 | BM | 96.5 | 37.1 | 18.2 |
| (102) Parker Brook | Near mouth | 743037.94, 4697525.99 | BM | 4.90 | 82.7 | 9.6 |
| (110) Long & Whitehall Pond | Outlet | 747478.62, 4695359.05 | BM | 5.39 | 37.4 | 17.8 |
| (107) West Branch Ware River** | Rt. 62 | 747232.57, 4703274.853 | BM | 16.63 | 44.9 | 15.4 |
| (116) Asnacomet Pond | Outlet | 747782.81, 4704541.58 | BM | 0.84 | 20.9 | 29.8 |
| (105) Ware River | Barre falls | 744691.70, 4701416.45 | BM | 55.1 | 34.5 | 15.6 |
| (108) East Branch Ware River | New Boston | 747583.35, 4698773.88 | BM | 22.04 | 12.3 | 16.5 |
| (109) Longmeadow Brook** | Near mouth | 746985.70, 4698388.56 | BM | 12.24 | 47.8 | --- |
| (121) Mill Brook | Charnock Hill Rd | 748372.91, 4697303.13 | BM | 3.48 | 13.1 | 15.5 |
| (115) Brigham Pond | Outlet | 746627.62, 4705896.43 | BM | 11.37 | 37.4 | 15.4 |
| Moulton Pond | Outlet | 750306.07, 4696825.89 | BM | 1.71 | 2.0 | 16.4 |
| (119) Demon Pond | Outlet | 749364.30, 4693609.89 | BM | 2.25 | 14.2 | 18.2 |

Notes: 1) BM - Bimonthly 2) *North American Datum (NAD) 27. 3) **Area figures represent totals of stream basin in which sample site lies.

## 4.0 WATER QUALITY DATA

Water quality data for individual sample stations can be found in Appendix A of this report. Tables 3a and 3b list each parameter analyzed with ranges of minimum, maximum average, median and mode concentrations. Provided below is a brief discussion on each parameter routinely monitored in watershed streams. Information in this section was referenced from the Massachusetts Surface Water Quality Standards, Principles of Water Quality (1984) and USEPA's 1986 Quality Criteria for Water.

Coliform Bacteria

Total and Fecal coliform bacteria are used as possible indicators of fecal matter contamination because they are normal inhabitants of the intestinal tract of man and other animals. Levels can vary greatly depending upon pollutant inputs, stream temperatures, precipitation inputs and stream flows. Geldreich and Kenner (1969) found that bacterial densities (# fecal colonies per gram of feces) for cows and humans ranged from 230,000 to 13,000,000 respectively. The Massachusetts Class A, inland water standard for fecal coliform is an arithmetic mean of ≤20/100ml, and, no more than 10% of representative samples shall exceed 100/100ml.

Dissolved Oxygen

Aquatic life depends on oxygen dissolved in water for its survival. Oxygen levels are depleted through the oxygen requirements of aquatic life, the decomposition of organic matter and the introduction of foreign oxygen-demanding substances. Stream flow, turbulence and physical characteristics of the stream principally drive reaeration. The Massachusetts Class A, inland water standard is a minimum of 6.0 mg/l for cold water fisheries.

Turbidity

Turbidity is the relative measure of the amount of light refracting and absorbing particles suspended in the water column. Turbidity is used as an indicator of water aesthetics and as a relative measure of the water's productivity. Excessive turbidity can interfere with treatment efficiency and may be harmful to aquatic species. The drinking water standard is 5 NTU for source water and 1 NTU for finished water.

Color

Color is caused by particulate matter such as decaying organics and certain inorganics. Color is an important characteristic because it is an indication of humic content and, therefore, of dissolved organics capable of forming carcinogenic compounds when reacted with chlorine disinfectant.

pH

The pH is the measure of the water's reactive characteristics. A drop in pH by one unit represents a ten-fold increase in acidity. The lower the pH the more likely the water will dissolve metals and other substances. A value of 7 indicates neutral water. pH is also an important factor in the solubility of persistent heavy metals such as mercury. At pH levels below 6, soluble methyl mercury remains incorporated in the water system and accumulates in living organisms. The standard specified for Massachusetts Class A, inland waters ranges from 6.5 to 8.3.

Alkalinity

Alkalinity is a relative measure of the water's ability to neutralize acidic inputs, and thus is a measure of a waterbodies defense against acidification. It is also commonly used as a tool for measuring the total inorganic carbon of a system.

**Table 3a.** Range of values among water quality parameters routinely monitored in Quabbin Tributaries (1997).

| Parameter | Observed Range of Values | | | | |
|---|---|---|---|---|---|
| | Min. | Max. | Avg. | Median | Mode |
| Fecal Coliform (colonies/100ML) | 0 | 250 | 13 | 4 | 0 |
| Total Coliform (colonies/100ML) | 0 | 1000 | 153 | 80 | 50 |
| Turbidity (NTU) | 0.2 | 2.5 | 0.5 | 0.4 | 0.4 |
| Color (color units) | 7 | 65 | 32 | 33 | 10 |
| pH (pH units) | 5.1 | 7.3 | 6.3 | 6.3 | 6.6 |
| Temp (°C) | 0 | 22 | 8.0 | 7.5 | 0 |
| Dissolved Oxygen (mg/l) | 3.8 | 13.6 | 10.4 | 10.7 | 12.6 |
| Alkalinity (mg/l as CaCO3) | 1.2 | 32.6 | 6.7 | 5.7 | 3.4 |
| Hardness (mg/l as CaCO3) | 7 | 27.5 | 12.8 | 10.7 | 11.1 |
| Specific Conductance (micromhos per cm) | 27 | 112 | 60.8 | 62 | 62 |
| Iron (mg/l) | 0.04 | 1.5 | 0.23 | 0.13 | 0.12 |
| Chlorides (mg/l) | 4.2 | 22.5 | 11.6 | 11.7 | 11.8 |
| Total Solids (ppm) | 28 | 76 | 50.9 | 51 | 51 |
| Fixed Solids (ppm) | 15 | 54 | 32.6 | 31 | 26 |

Iron (Fe)

Iron is a natural element found in rocks, soil and used widely in steel products and as water supply piping. Iron is generally found in natural waterbodies at concentrations below 0.5 mg/l. Concentrations greater than 0.1 mg/l can precipitate after exposure to the air, causing iron staining and objectionable tastes.

Total and Fixed Solids

Total solids is a measure of the amount of total dissolved and suspended matter. Total fixed solids is a measure of inorganic grit and dissolved inorganic matter, plus ash of organic matter. A concentration of 80 mg/l of fixed solids (200 mg/l total) is representative of a weak domestic sewage.

Specific Conductance

Specific electrical conductance is a measure of the ability of water to conduct an electrical current. Conductance is principally used as an indicator of the amount of dissolved minerals within the water.

**Table 3b.** Range of values among water quality parameters routinely monitored in Ware River Tributaries (1997).

| Parameter | Observed Range of Values | | | | |
|---|---|---|---|---|---|
| | Min. | Max. | Avg. | Median | Mode |
| Fecal Coliform (colonies/100ML) | 0 | 700 | 23.9 | 17.7 | 0 |
| Total Coliform (colonies/100ML) | 0 | 1300 | 128.6 | 65 | 50 |
| Turbidity (NTU) | 0.3 | 3.8 | 0.9 | 0.6 | 0.4 |
| Color (color units) | 7 | 200 | 49.9 | 47 | 47 |
| pH (pH units) | 5.6 | 7.0 | 6.3 | 6.3 | 6.4 |
| Temp (°C) | 0 | 25 | 9.7 | 8.0 | 0 |
| Dissolved Oxygen (mg/l) | 0.2 | 13.4 | 9.3 | 9.6 | 12.8 |
| Alkalinity (mg/l as CaCO3) | 2.3 | 33.2 | 6.9 | 5.8 | 3.6 |
| Hardness (mg/l as CaCO3) | 7 | 39.3 | 14.5 | 13.6 | 12.7 |
| Specific Conductance (micromhos per cm) | 32 | 230 | 80.9 | 62 | 50 |
| Iron (mg/l) | 0.04 | 3.0 | 0.49 | 0.36 | 0.08 |
| Chlorides (mg/l) | 4.9 | 57.0 | 18.5 | 14.2 | 8.5 |
| Total Solids (ppm) | 25 | 132 | 62.7 | 56 | 41 |
| Fixed Solids (ppm) | 12 | 102 | 42.3 | 34 | 28 |

Hardness

Hardness is principally an indirect measure of the calcium and magnesium ions present in water. In general, water containing less than 50 mg/l as CaCO3 is considered "soft" and corrosive. In conventional water treatment, "hard" water has been shown to play a significant role in preventing the leaching of potentially toxic metal ions such as lead, cadmium and zinc from bounded, insoluble complexes.

Chlorides

The federal secondary drinking water standard for chloride is 250 mg/l to avoid brackish tastes. Salt used for highway de-icing is typically the principal source of surface and groundwater contamination. Other sources include sedimentary rocks and waste discharges from hard water softener units.

Temperature

In 1997, stream temperatures ranged from 0 to 25 degrees Celsius among Quabbin and Ware River tributaries. The Massachusetts Class A, inland water standard is a maximum of 20°C for cold water fisheries.

## 5.0 SPECIAL INVESTIGATIONS

Provided below is a brief overview DWM investigations and responses to site specific sources of pollution. Sampling results from field investigations are included in Section 9.0, Special Investigations.

*Giardia and Cryptosporidium*

As part of the filtration waiver granted to the CVA supply, the DWM/MWRA is required to routinely monitor for *Giardia* spp. cysts and *Cryptosporidium* spp. oocyst. Water samples were collected on a bi-weekly basis throughout the year. Sample collection and analysis follows protocols established by Standard Methods, 19th Edition, 1995 and from the Draft Analytical Guidance Manual for the ICR, US EPA, 1995. Samples were analyzed by the Erie County Water Authority out of New York. Collection is performed by MDC staff and samples are shipped to the lab within 48 hours of collection. Equipment utililized in sample collection includes a portable water filtering unit equipped with a flowmeter, battery powered pump, polypropylene-wound cartridge filter (1 um), and clear laboratory tubing. The volume of water filtered will vary depending upon sediment content and time constraints, however the target sample size is 100 gallons.

*Microbiological Characterization of Fall Bacteria Bloom*

Researchers from the University of Massachusetts investigated current MDC/MWRA laboratory procedures and environmental factors that may help to explain the cause of the Fall total coliform bacterial bloom experienced in 1995. Researchers studied the effects of sample holding time, chromogenic media, particle content, total organic carbon (TOC) levels, and sample dilution on recoveries of spiked *E. coli* bacteria. In laboratory testing, researchers found that *E. coli* concentrations remained fairly constant through the three hour sample holding time typical of the longest times indicated by both MWRA and MDC. Particle content and TOC levels varied in spiked samples from the Winsor Power Station and Boat Cove tributary, also showed little variation over the three hour period and were deemed insignificant factors. Media performance of m-Endo compared favorably with another media tested and was deemed an insignificant factor. The two parameters deemed most significant were sample dilution and Fall time leaf-litter contribution. Researchers were able to show that leaf debris provided a micro habitat and significant TOC level capable of supporting large microbial populations. Also, researchers suggested diluting water samples to eliminate background bacteria capable of impeding growth and masking coliform colonies.

*Stream Surveys*

In response to elevated fecal coliform levels or suspected pollution threats, follow-up stream surveys and/or sampling was performed on the following streams:

West Branch Swift - September 1997
Middle Branch Swift - January 1997
Burnshirt - July 1997
Hop Brook - July 1997
Gates Brook - December 1997

Summarized accounts of field surveys have been included in the appendix of this report.

*Gull Roost Site Sampling*

Division staff and graduate students from the University of Massachusetts attempted on five occassions to collect samples by boat from areas in which the gulls had been roosting on the water. Attempts were made in the evening hours within a matter of 1-3 hours after the initial settling of the gulls. The field data is being compared to model simulated results obtained using the CE-QUAL-W2 model developed by the University of Massachusetts. Future development, calibration and verification of the two dimensional model is expected.

*Plane Crash, December 9, 1997*

Samples were collected from the reservoir surface at three sites and the CVA Intake following the crash of a single engine plane into waters approximately ½ mile off shore of Prescott Peninsula and south of Target Island (Crash site coordinates: Lat. 42°24'47"N Long. 72°18'35"W). Reservoir sample sites included the site of the plane crash, Shaft 12 (206), and Enfield Channel. Volatile organic compound (VOC) analyses of the initial round of samples collected December 11 showed that levels were all nondetectable except for the compound 1,2,3 Trichlorobenzene, present at levels slightly above detectable limits (0.5 parts per billion) in surface water collected near Shaft 12. Re-sampling of Shaft 12 waters on December 18 confirmed that the water was free of VOC's and left speculation that the intial detection may have been attributed to fouling from the surface of the boat or during lab analysis.

# APPENDIX A

# WATER QUALITY DATA TABLES

# 6.0 QUABBIN RESERVOIR TRIBUTARIES

# WATER QUALITY DATA

QUABBIN LABORATORY RECORDS 1997
(206) QUABBIN RESERVOIR @ SHAFT #12

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/06 | 0.3 | | | | 6.5 | 4.8 | 3.1 | 12.0 | 92 | 4 | | | | 42 | 4 | 0 |
| 01/13 | 0.3 | | | | 6.5 | 4.3 | 2.7 | 11.8 | 88 | 3 | | | | 42 | 1 | 0 |
| 01/21 | 0.3 | | | | 6.5 | 4.4 | 2.4 | 13.1 | 90 | 0 | | | | 43 | 3 | 0 |
| 01/27 | 0.3 | | | | 6.5 | 4.6 | 2.4 | 12.6 | 89 | 1 | | | | 42 | 0 | 0 |
| 02/03 | 0.3 | | | | 6.5 | 4.3 | 2.7 | 12.4 | 88 | 1 | | | | 42 | 1 | 0 |
| 02/10 | 0.3 | 5 | 5.5 | 9.5 | 6.4 | 4.0 | 2.6 | 12.6 | 89 | 1 | 28 | 20 | 0.04 | 42 | 1 | 0 |
| 02/18 | 0.3 | | | | 6.5 | 4.7 | 3.1 | 12.5 | 88 | 1 | | | | 42 | 2 | 0 |
| 02/24 | 0.3 | | | | 6.5 | 4.8 | 2.5 | 12.6 | 89 | 1 | | | | 42 | 4 | 0 |
| 03/03 | 0.3 | | | | 6.5 | 4.3 | 2.4 | 12.6 | 91 | 2 | | | | 42 | 2 | 0 |
| 03/10 | 0.3 | | | | 6.5 | 4.5 | 3.0 | 12.6 | 89 | 1 | | | | 42 | 2 | 0 |
| 03/17 | 0.3 | | | | 6.5 | 4.4 | 2.5 | 12.6 | 89 | 1 | | | | 43 | 5 | 0 |
| 03/24 | 0.3 | | | | 6.4 | 3.9 | 2.3 | 12.7 | 92 | 2 | | | | 42 | 2 | 0 |
| 03/31 | 0.3 | | | | 6.4 | 3.9 | 2.5 | 12.8 | 96 | 3 | | | | 42 | | |
| 04/07 | 0.3 | | | | 6.4 | 3.9 | 2.3 | 11.8 | 93 | 5 | | | | 40 | 2 | 0 |
| 04/14 | 0.3 | | | | 6.5 | 4.5 | 2.6 | 12.3 | 95 | 4 | | | | 40 | 4 | 0 |
| 04/22 | 0.3 | | | | 6.6 | 4.5 | 2.4 | 12.3 | 99 | 6 | | | | 40 | 25 | 0 |
| 04/28 | 0.3 | | | | 6.6 | 4.2 | 2.6 | 11.9 | 98 | 7 | | | | 40 | 10 | 0 |
| 05/05 | 0.3 | 5 | 6.2 | 13.2 | 6.5 | 4.0 | 2.2 | 11.6 | 101 | 9 | 29 | 20 | 0.03 | 40 | 1 | 0 |
| 05/12 | 0.3 | | | | 6.5 | 4.0 | 2.6 | 11.8 | 102 | 9 | | | | 40 | 17 | 0 |
| 05/19 | 0.3 | | | | 6.5 | 4.0 | 2.4 | 11.0 | 98 | 10 | | | | 40 | 21 | 0 |
| 05/27 | 0.3 | | | | 6.5 | 4.1 | 2.8 | 10.8 | 96 | 10 | | | | 40 | 22 | 0 |
| 06/02 | 0.3 | | | | 6.5 | 4.2 | 2.5 | 10.0 | 93 | 12 | | | | 40 | 28 | 1 |
| 06/09 | 0.3 | | | | 6.6 | 4.2 | 2.4 | 9.9 | 98 | 15 | | | | 42 | 11 | 7 |
| 06/16 | 0.3 | | | | 6.6 | 4.2 | 2.3 | 9.7 | 102 | 18 | | | | 40 | 6 | 0 |
| 06/23 | 0.4 | | | | 6.6 | 4.2 | 2.5 | 8.6 | 96 | 21 | | | | 40 | 8 | 1 |
| 06/30 | 0.3 | | | | 6.6 | 4.4 | 2.6 | 8.4 | 97 | 23 | | | | 40 | 50 | 11 |
| 07/07 | 0.3 | | | | 6.6 | 4.2 | 2.5 | 8.3 | 96 | 23 | | | | 40 | 6 | 0 |
| 07/14 | 0.3 | | | | 6.6 | 4.1 | 2.4 | 8.2 | 98 | 25 | | | | 40 | 3 | 0 |
| 07/21 | 0.3 | | | | 6.7 | 4.2 | 2.7 | 8.1 | 94 | 23 | | | | 40 | 2 | 0 |
| 07/28 | 0.3 | | | | 6.6 | 4.1 | 2.0 | 8.1 | 95 | 24 | | | | 40 | 3 | 0 |
| 08/04 | 0.3 | | | | 6.6 | 4.0 | 2.6 | 8.0 | 94 | 24 | | | | 40 | 50 | 5 |
| 08/11 | 0.3 | 5 | 5.4 | 10.8 | 6.6 | 4.0 | 2.2 | 8.2 | 96 | 24 | 32 | 23 | 0.05 | 40 | 80 | 1 |
| 08/18 | 0.3 | | | | 6.5 | 4.0 | 2.6 | 8.2 | 96 | 24 | | | | 40 | 23 | 2 |
| 08/25 | 0.3 | | | | 6.6 | 4.0 | 2.0 | 8.3 | 94 | 22 | | | | 40 | 22 | 0 |
| 09/02 | 0.3 | | | | 6.6 | 4.2 | 2.5 | 8.2 | 95 | 23 | | | | 40 | 100 | 0 |
| 09/08 | 0.4 | | | | 6.6 | 4.3 | 2.6 | 8.3 | 93 | 21 | | | | 42 | 120 | 0 |
| 09/15 | 0.3 | | | | 6.6 | 4.4 | 2.7 | 8.3 | 93 | 21 | | | | 40 | 13 | 0 |
| 09/22 | 0.3 | | | | 6.6 | 4.2 | 2.4 | 8.3 | 89 | 19 | | | | 40 | 12 | 0 |
| 09/29 | 0.3 | | | | 6.6 | 4.3 | 2.5 | 8.7 | 92 | 18 | | | | 40 | | |
| 10/02 | | | | | | | | | | | | | | | 170 | 0 |
| 10/06 | 0.3 | | | | 6.5 | 4.1 | 2.4 | 8.8 | 91 | 17 | | | | 40 | 500 | 0 |
| 10/14 | 0.3 | | | | 6.5 | 4.1 | 2.3 | 8.8 | 91 | 17 | | | | 40 | 18 | 0 |
| 10/20 | 0.3 | | | | 6.6 | 4.5 | 2.4 | 9.6 | 95 | 15 | | | | 40 | 70 | 0 |
| 10/27 | 0.3 | | | | 6.6 | 4.2 | 2.5 | 9.1 | 86 | 13 | | | | 40 | 57 | 0 |
| 11/03 | 0.3 | 5 | 6.7 | 13.7 | 6.5 | 4.0 | 2.2 | 9.4 | 87 | 12 | 21 | 10 | 0.05 | 40 | 53 | 0 |
| 11/12 | 0.3 | | | | 6.5 | 4.1 | 2.7 | 10.0 | 91 | 11 | | | | 40 | 15 | 0 |
| 11/17 | 0.3 | | | | 6.5 | 3.9 | 2.5 | 10.2 | 89 | 9 | | | | 40 | 5 | 0 |
| 11/24 | 0.3 | | | | 6.5 | 4.0 | 2.6 | 10.2 | 86 | 8 | | | | 40 | 11 | 0 |
| 12/01 | 0.4 | | | | 6.5 | 4.1 | 2.3 | 11.4 | 92 | 6 | | | | 40 | 12 | 0 |
| 12/08 | 0.3 | | | | 6.5 | 4.1 | 2.4 | 10.9 | 86 | 5 | | | | 42 | 3 | 0 |
| 12/15 | 0.3 | | | | 6.5 | 4.0 | 2.3 | 11.2 | 86 | 4 | | | | 40 | 5 | 0 |
| 12/22 | 0.3 | | | | 6.5 | 4.2 | 2.7 | 11.2 | 86 | 4 | | | | 40 | 7 | 0 |
| 12/29 | 0.3 | | | | 6.5 | 4.2 | 2.6 | 11.2 | 86 | 4 | | | | 40 | 7 | 0 |
| AVG. | 0.3 | 5 | 6.0 | 11.8 | 6.5 | 4.2 | 2.5 | 10.4 | 93 | 11 | 28 | 18 | 0.04 | 41 | 31 | 1 |
| MAX. | 0.4 | 5 | 6.7 | 13.7 | 6.7 | 4.8 | 3.1 | 13.1 | 102 | 25 | 32 | 23 | 0.05 | 43 | 500 | 11 |
| MIN. | 0.3 | 5 | 5.4 | 9.5 | 6.4 | 3.9 | 2.0 | 8.0 | 86 | 0 | 21 | 10 | 0.03 | 40 | 0 | 0 |

QUABBIN LABORATORY RECORDS 1997
(201) QUABBIN RESERVOIR @ OUTLET BUILDING

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | AM/PM | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/02 | | | | | | | | | | | | | | | AM | 9 | |
| 01/02 | | | | | | | | | | | | | | | PM | | |
| 01/03 | | | | | | | | | | | | | | | AM | | |
| 01/03 | | | | | | | | | | | | | | | PM | | |
| 01/04 | | | | | | | | | | | | | | | PM | | |
| 01/06 | 0.3 | | | | 6.5 | 4.0 | 2.2 | 11.4 | 92 | 6 | | | | 42 | AM | 2 | |
| 01/06 | | | | | | | | | | | | | | | PM | | |
| 01/07 | | | | | | | | | | | | | | | AM | 0 | |
| 01/07 | | | | | | | | | | | | | | | PM | | |
| 01/08 | | | | | | | | | | | | | | | AM | 2 | |
| 01/08 | | | | | | | | | | | | | | | PM | | |
| 01/09 | | | | | | | | | | | | | | | AM | 3 | |
| 01/09 | | | | | | | | | | | | | | | PM | | |
| 01/10 | | | | | | | | | | | | | | | AM | 3 | |
| 01/10 | | | | | | | | | | | | | | | PM | | |
| 01/11 | | | | | | | | | | | | | | | PM | | |
| 01/13 | 0.3 | | | | 6.5 | 4.2 | 2.4 | 11.2 | 88 | 5 | | | | 42 | AM | 1 | |
| 01/13 | | | | | | | | | | | | | | | PM | | |
| 01/14 | | | | | | | | | | | | | | | AM | 3 | |
| 01/14 | | | | | | | | | | | | | | | PM | | |
| 01/15 | | | | | | | | | | | | | | | AM | 3 | |
| 01/15 | | | | | | | | | | | | | | | PM | | |
| 01/16 | | | | | | | | | | | | | | | AM | 3 | |
| 01/16 | | | | | | | | | | | | | | | PM | | |
| 01/17 | | | | | | | | | | | | | | | AM | | |
| 01/17 | | | | | | | | | | | | | | | PM | | |
| 01/18 | | | | | | | | | | | | | | | PM | | |
| 01/19 | | | | | | | | | | | | | | | PM | | |
| 01/21 | 0.2 | | | | 6.5 | 4.3 | 2.8 | 12.0 | 90 | 3 | | | | 42 | AM | 1 | |
| 01/21 | | | | | | | | | | | | | | | PM | | |
| 01/22 | | | | | | | | | | | | | | | AM | 1 | |
| 01/22 | | | | | | | | | | | | | | | PM | | |
| 01/23 | | | | | | | | | | | | | | | AM | 4 | |
| 01/23 | | | | | | | | | | | | | | | PM | | |
| 01/24 | | | | | | | | | | | | | | | AM | | |
| 01/24 | | | | | | | | | | | | | | | PM | | |
| 01/27 | 0.2 | | | | 6.5 | 4.3 | 2.5 | 11.8 | 88 | 3 | | | | 42 | AM | 3 | |
| 01/27 | | | | | | | | | | | | | | | PM | | |
| 01/28 | | | | | | | | | | | | | | | AM | 4 | |
| 01/28 | | | | | | | | | | | | | | | PM | | |
| 01/29 | | | | | | | | | | | | | | | AM | 3 | |
| 01/29 | | | | | | | | | | | | | | | PM | | |
| 01/30 | | | | | | | | | | | | | | | AM | 3 | |
| 01/30 | | | | | | | | | | | | | | | PM | | |
| 01/31 | | | | | | | | | | | | | | | AM | | |
| 01/31 | | | | | | | | | | | | | | | PM | | |
| 02/01 | | | | | | | | | | | | | | | PM | | |
| 02/02 | | | | | | | | | | | | | | | PM | | |
| 02/03 | 0.2 | | | | 6.4 | 4.3 | 2.6 | 11.9 | 89 | 3 | | | | 42 | AM | 6 | |
| 02/03 | | | | | | | | | | | | | | | PM | | |
| 02/04 | | | | | | | | | | | | | | | AM | 1 | |
| 02/04 | | | | | | | | | | | | | | | PM | | |
| 02/05 | | | | | | | | | | | | | | | AM | 1 | |
| 02/05 | | | | | | | | | | | | | | | PM | | |
| 02/06 | | | | | | | | | | | | | | | AM | 1 | |

QUABBIN LABORATORY RECORDS 1997
201) QUABBIN RESERVOIR @ OUTLET BUILDING

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | AM/PM | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2/06 | | | | | | | | | | | | | | | PM | | 1 |
| 2/07 | | | | | | | | | | | | | | | AM | | 0 |
| 2/07 | | | | | | | | | | | | | | | PM | | 1 |
| 2/08 | | | | | | | | | | | | | | | PM | | 0 |
| 2/09 | | | | | | | | | | | | | | | PM | | 0 |
| 2/10 | 0.2 | 5 | 6.0 | 11.0 | 6.5 | 4.4 | 2.9 | 12.2 | 91 | 3 | 28 | 19 | 0.03 | 43 | AM | 1 | 1 |
| 2/10 | | | | | | | | | | | | | | | PM | | 0 |
| 2/11 | | | | | | | | | | | | | | | AM | 0 | 0 |
| 2/11 | | | | | | | | | | | | | | | PM | | 0 |
| 2/12 | | | | | | | | | | | | | | | AM | 1 | 2 |
| 2/12 | | | | | | | | | | | | | | | PM | | 0 |
| 2/13 | | | | | | | | | | | | | | | AM | 2 | 1 |
| 2/13 | | | | | | | | | | | | | | | PM | | 0 |
| 2/14 | | | | | | | | | | | | | | | AM | | 0 |
| 2/14 | | | | | | | | | | | | | | | PM | | 0 |
| 2/15 | | | | | | | | | | | | | | | PM | | 0 |
| 2/16 | | | | | | | | | | | | | | | PM | | 0 |
| 2/17 | | | | | | | | | | | | | | | PM | | 0 |
| 2/18 | 0.3 | | | | 6.5 | 4.1 | 2.1 | 12.2 | 89 | 2 | | | | 42 | AM | 0 | 0 |
| 2/18 | | | | | | | | | | | | | | | PM | 2 | 0 |
| 2/19 | | | | | | | | | | | | | | | AM | 5 | 2 |
| 2/19 | | | | | | | | | | | | | | | PM | | 1 |
| 2/20 | | | | | | | | | | | | | | | AM | 2 | 0 |
| 2/20 | | | | | | | | | | | | | | | PM | | 1 |
| 2/21 | | | | | | | | | | | | | | | AM | | 1 |
| 2/21 | | | | | | | | | | | | | | | PM | | 1 |
| 2/22 | | | | | | | | | | | | | | | PM | | 2 |
| 2/23 | | | | | | | | | | | | | | | PM | | 5 |
| 2/24 | 0.2 | | | | 6.5 | 4.2 | 2.1 | 12.2 | 89 | 2 | | | | 40 | AM | 3 | 2 |
| 2/24 | | | | | | | | | | | | | | | PM | | 1 |
| 2/25 | | | | | | | | | | | | | | | AM | 5 | 0 |
| 2/25 | | | | | | | | | | | | | | | PM | | 1 |
| 2/26 | | | | | | | | | | | | | | | AM | 4 | 2 |
| 2/26 | | | | | | | | | | | | | | | PM | | 0 |
| 2/27 | | | | | | | | | | | | | | | AM | 2 | 1 |
| 2/27 | | | | | | | | | | | | | | | PM | | 1 |
| 2/28 | | | | | | | | | | | | | | | AM | | 3 |
| 2/28 | | | | | | | | | | | | | | | PM | | 0 |
| 03/01 | | | | | | | | | | | | | | | PM | | 1 |
| 03/02 | | | | | | | | | | | | | | | PM | | 0 |
| 03/03 | 0.2 | | | | 6.5 | 4.4 | 2.8 | 12.4 | 93 | 3 | | | | 40 | AM | 1 | 1 |
| 03/03 | | | | | | | | | | | | | | | PM | | 0 |
| 03/04 | | | | | | | | | | | | | | | AM | 4 | 1 |
| 03/04 | | | | | | | | | | | | | | | PM | | 0 |
| 03/05 | | | | | | | | | | | | | | | AM | 2 | 1 |
| 03/05 | | | | | | | | | | | | | | | PM | | 0 |
| 03/06 | | | | | | | | | | | | | | | AM | 2 | 1 |
| 03/06 | | | | | | | | | | | | | | | PM | | 2 |
| 03/07 | | | | | | | | | | | | | | | AM | | 0 |
| 03/07 | | | | | | | | | | | | | | | PM | | 0 |
| 03/08 | | | | | | | | | | | | | | | PM | | 0 |
| 03/09 | | | | | | | | | | | | | | | PM | | 2 |
| 03/10 | 0.2 | | | | 6.5 | 4.1 | 2.3 | 12.3 | 92 | 3 | | | | 42 | AM | 0 | 0 |
| 03/10 | | | | | | | | | | | | | | | PM | | 0 |
| 03/11 | | | | | | | | | | | | | | | AM | 0 | 0 |

QUABBIN LABORATORY RECORDS 1997
(201) QUABBIN RESERVOIR @ OUTLET BUILDING

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | AM/PM | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 03/11 | | | | | | | | | | | | | | | PM | | |
| 03/12 | | | | | | | | | | | | | | | AM | 3 | |
| 03/12 | | | | | | | | | | | | | | | PM | | |
| 03/13 | | | | | | | | | | | | | | | AM | 3 | |
| 03/13 | | | | | | | | | | | | | | | PM | | |
| 03/14 | | | | | | | | | | | | | | | AM | | |
| 03/14 | | | | | | | | | | | | | | | PM | | |
| 03/15 | | | | | | | | | | | | | | | PM | | |
| 03/16 | | | | | | | | | | | | | | | PM | | |
| 03/17 | 0.3 | | | | 6.4 | 4.2 | 2.8 | 12.4 | 90 | 2 | | | | 42 | AM | 1 | |
| 03/17 | | | | | | | | | | | | | | | PM | | |
| 03/18 | | | | | | | | | | | | | | | AM | 2 | |
| 03/18 | | | | | | | | | | | | | | | PM | | |
| 03/19 | | | | | | | | | | | | | | | AM | 0 | |
| 03/19 | | | | | | | | | | | | | | | PM | | |
| 03/20 | | | | | | | | | | | | | | | AM | 1 | |
| 03/20 | | | | | | | | | | | | | | | PM | | |
| 03/21 | | | | | | | | | | | | | | | AM | | |
| 03/21 | | | | | | | | | | | | | | | PM | | |
| 03/22 | | | | | | | | | | | | | | | PM | | |
| 03/23 | | | | | | | | | | | | | | | PM | | |
| 03/24 | 0.2 | | | | 6.4 | 3.9 | 2.2 | 12.6 | 91 | 2 | | | | 42 | AM | 2 | |
| 03/24 | | | | | | | | | | | | | | | PM | | |
| 03/25 | | | | | | | | | | | | | | | AM | 2 | |
| 03/25 | | | | | | | | | | | | | | | PM | | |
| 03/26 | | | | | | | | | | | | | | | AM | 1 | |
| 03/26 | | | | | | | | | | | | | | | PM | | |
| 03/27 | | | | | | | | | | | | | | | AM | 0 | |
| 03/27 | | | | | | | | | | | | | | | PM | | |
| 03/28 | | | | | | | | | | | | | | | AM | | |
| 03/28 | | | | | | | | | | | | | | | PM | | |
| 03/31 | 0.2 | | | | 6.4 | 4.2 | 2.7 | 12.6 | 94 | 3 | | | | 42 | AM | | |
| 04/02 | | | | | | | | | | | | | | | AM | 7 | |
| 04/02 | | | | | | | | | | | | | | | PM | | |
| 04/03 | | | | | | | | | | | | | | | AM | 12 | 1 |
| 04/03 | | | | | | | | | | | | | | | PM | | |
| 04/04 | | | | | | | | | | | | | | | AM | | |
| 04/04 | | | | | | | | | | | | | | | PM | | |
| 04/05 | | | | | | | | | | | | | | | PM | | |
| 04/06 | | | | | | | | | | | | | | | PM | | |
| 04/07 | 0.2 | | | | 6.4 | 4.1 | 2.7 | 12.3 | 96 | 5 | | | | 42 | AM | 1 | |
| 04/07 | | | | | | | | | | | | | | | PM | | |
| 04/08 | | | | | | | | | | | | | | | AM | 1 | |
| 04/08 | | | | | | | | | | | | | | | PM | | |
| 04/09 | | | | | | | | | | | | | | | AM | 3 | |
| 04/09 | | | | | | | | | | | | | | | PM | | |
| 04/10 | | | | | | | | | | | | | | | AM | 6 | |
| 04/10 | | | | | | | | | | | | | | | PM | | |
| 04/11 | | | | | | | | | | | | | | | AM | | |
| 04/11 | | | | | | | | | | | | | | | PM | | |
| 04/12 | | | | | | | | | | | | | | | PM | | |
| 04/13 | | | | | | | | | | | | | | | PM | | |
| 04/14 | 0.3 | | | | 6.5 | 4.2 | 2.7 | 12.3 | 96 | 5 | | | | 40 | AM | 1 | |
| 04/14 | | | | | | | | | | | | | | | PM | | |
| 04/15 | | | | | | | | | | | | | | | AM | 0 | |

QUABBIN LABORATORY RECORDS 1997
(01) QUABBIN RESERVOIR @ OUTLET BUILDING

| ATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | AM/PM | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| /15 | | | | | | | | | | | | | | | PM | | 0 |
| /16 | | | | | | | | | | | | | | | AM | 0 | 0 |
| /16 | | | | | | | | | | | | | | | PM | | 0 |
| /17 | | | | | | | | | | | | | | | AM | 0 | 0 |
| /17 | | | | | | | | | | | | | | | PM | | 0 |
| /18 | | | | | | | | | | | | | | | AM | | 0 |
| /18 | | | | | | | | | | | | | | | PM | | 2 |
| /19 | | | | | | | | | | | | | | | PM | | 0 |
| /20 | | | | | | | | | | | | | | | PM | | 0 |
| /21 | | | | | | | | | | | | | | | PM | | 0 |
| /22 | 0.3 | | | | 6.6 | 4.0 | 2.0 | 12.5 | 101 | 6 | | | | 40 | AM | 4 | 0 |
| /23 | | | | | | | | | | | | | | | AM | 4 | 1 |
| /24 | | | | | | | | | | | | | | | AM | 3 | 0 |
| /28 | 0.3 | | | | 6.5 | 4.0 | 2.2 | 12.3 | 99 | 6 | | | | 40 | AM | 3 | 3 |
| /29 | | | | | | | | | | | | | | | AM | 2 | 1 |
| /30 | | | | | | | | | | | | | | | AM | 0 | 0 |
| /01 | | | | | | | | | | | | | | | AM | 6 | 1 |
| /05 | 0.3 | 5 | 6.3 | 11.1 | 6.5 | 4.4 | 2.8 | 11.6 | 96 | 7 | 32 | 23 | 0.03 | 40 | AM | 1 | 0 |
| /06 | | | | | | | | | | | | | | | AM | 2 | 0 |
| /07 | | | | | | | | | | | | | | | AM | 3 | 0 |
| /08 | | | | | | | | | | | | | | | AM | 3 | 0 |
| /12 | 0.3 | | | | 6.5 | 4.3 | 2.8 | 12.2 | 103 | 8 | | | | 40 | AM | 3 | 0 |
| /13 | | | | | | | | | | | | | | | AM | 1 | 1 |
| /14 | | | | | | | | | | | | | | | AM | 3 | 0 |
| /15 | | | | | | | | | | | | | | | AM | 4 | 0 |
| /19 | 0.3 | | | | 6.5 | 4.0 | 2.2 | 11.6 | 101 | 9 | | | | 40 | AM | 3 | 1 |
| /20 | | | | | | | | | | | | | | | AM | 2 | 0 |
| /21 | | | | | | | | | | | | | | | AM | 0 | 0 |
| /22 | | | | | | | | | | | | | | | AM | 2 | 0 |
| /27 | 0.3 | | | | 6.5 | 4.0 | 2.7 | 10.7 | 97 | 11 | | | | 40 | AM | 0 | 0 |
| /28 | | | | | | | | | | | | | | | AM | 1 | 0 |
| /29 | | | | | | | | | | | | | | | AM | 2 | 1 |
| /02 | 0.3 | | | | 6.5 | 4.0 | 2.2 | 10.6 | 98 | 12 | | | | 40 | AM | 0 | 0 |
| /03 | | | | | | | | | | | | | | | AM | 10 | 0 |
| /04 | | | | | | | | | | | | | | | AM | 2 | 0 |
| /05 | | | | | | | | | | | | | | | AM | 5 | 0 |
| /09 | 0.3 | | | | 6.5 | 4.2 | 2.5 | 10.9 | 97 | 10 | | | | 40 | AM | 3 | 0 |
| /10 | | | | | | | | | | | | | | | AM | 2 | 0 |
| /11 | | | | | | | | | | | | | | | AM | 1 | 0 |
| /12 | | | | | | | | | | | | | | | AM | 3 | 0 |
| /16 | 0.3 | | | | 6.6 | 4.1 | 2.5 | 10.9 | 97 | 10 | | | | 40 | AM | 0 | 0 |
| /17 | | | | | | | | | | | | | | | AM | 1 | 0 |
| /18 | | | | | | | | | | | | | | | AM | 1 | 0 |
| /19 | | | | | | | | | | | | | | | AM | 0 | 0 |
| /23 | 0.3 | | | | 6.5 | 4.1 | 2.5 | 10.9 | 99 | 11 | | | | 40 | AM | 2 | 0 |
| /24 | | | | | | | | | | | | | | | AM | 1 | 0 |
| /25 | | | | | | | | | | | | | | | AM | 2 | 0 |
| /26 | | | | | | | | | | | | | | | AM | 2 | 0 |
| /30 | 0.3 | | | | 6.6 | 4.0 | 2.4 | 8.6 | 80 | 12 | | | | 40 | AM | 1 | 0 |
| 7/01 | | | | | | | | | | | | | | | AM | 3 | 0 |
| 7/02 | | | | | | | | | | | | | | | AM | 3 | 0 |
| 7/07 | 0.3 | | | | 6.6 | 4.1 | 2.5 | 11.0 | 102 | 12 | | | | 40 | AM | 1 | 0 |
| 7/08 | | | | | | | | | | | | | | | AM | 0 | 0 |
| 7/09 | | | | | | | | | | | | | | | AM | 6 | 0 |
| 7/10 | | | | | | | | | | | | | | | AM | 0 | 0 |

QUABBIN LABORATORY RECORDS 1997
(201) QUABBIN RESERVOIR @ OUTLET BUILDING

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | AM/PM | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07/14 | 0.3 | | | | 6.5 | 4.0 | 2.3 | 10.9 | 101 | 12 | | | | 40 | AM | 1 | |
| 07/15 | | | | | | | | | | | | | | | AM | 0 | |
| 07/16 | | | | | | | | | | | | | | | AM | 0 | |
| 07/17 | | | | | | | | | | | | | | | AM | 0 | |
| 07/21 | 0.3 | | | | 6.7 | 4.2 | 2.8 | 11.0 | 102 | 12 | | | | 40 | AM | 0 | |
| 07/22 | | | | | | | | | | | | | | | AM | 0 | |
| 07/23 | | | | | | | | | | | | | | | AM | 1 | |
| 07/24 | | | | | | | | | | | | | | | AM | 4 | |
| 07/28 | 0.3 | | | | 6.6 | 4.1 | 2.1 | 11.0 | 104 | 13 | | | | 40 | AM | 0 | |
| 07/29 | | | | | | | | | | | | | | | AM | 1 | |
| 07/30 | | | | | | | | | | | | | | | AM | 0 | |
| 07/31 | | | | | | | | | | | | | | | AM | 1 | |
| 08/04 | 0.3 | | | | 6.5 | 4.1 | 2.8 | 11.0 | 104 | 13 | | | | 40 | AM | 0 | |
| 08/05 | | | | | | | | | | | | | | | AM | 2 | |
| 08/06 | | | | | | | | | | | | | | | AM | 2 | |
| 08/07 | | | | | | | | | | | | | | | AM | 3 | |
| 08/11 | 0.3 | 5 | 5.2 | 10.8 | 6.5 | 4.0 | 2.1 | 11.2 | 106 | 13 | 33 | 25 | 0.03 | 40 | AM | 0 | |
| 08/12 | | | | | | | | | | | | | | | AM | 1 | |
| 08/13 | | | | | | | | | | | | | | | AM | 1 | |
| 08/14 | | | | | | | | | | | | | | | AM | 0 | |
| 08/18 | 0.3 | | | | 6.5 | 4.0 | 2.6 | 11.2 | 106 | 13 | | | | 40 | AM | 1 | |
| 08/19 | | | | | | | | | | | | | | | AM | 1 | |
| 08/20 | | | | | | | | | | | | | | | AM | 1 | |
| 08/21 | | | | | | | | | | | | | | | AM | 1 | |
| 08/25 | 0.3 | | | | 6.5 | 3.9 | 1.9 | 10.8 | 100 | 12 | | | | 40 | AM | 3 | |
| 08/26 | | | | | | | | | | | | | | | AM | 3 | |
| 08/27 | | | | | | | | | | | | | | | AM | 1 | |
| 09/02 | 0.4 | | | | 6.5 | 4.0 | 2.3 | 11.0 | 107 | 14 | | | | 40 | AM | 1 | |
| 09/03 | | | | | | | | | | | | | | | AM | 4 | |
| 09/04 | 0.4 | | | | | | | | | | | | | | AM | 10 | |
| 09/08 | 0.4 | | | | 6.6 | 4.2 | 2.5 | 10.9 | 106 | 14 | | | | 40 | AM | 9 | |
| 09/09 | | | | | | | | | | | | | | | AM | 30 | |
| 09/10 | | | | | | | | | | | | | | | AM | 0 | |
| 09/11 | | | | | | | | | | | | | | | AM | 20 | |
| 09/15 | 0.3 | | | | 6.5 | 4.3 | 2.7 | 10.5 | 100 | 13 | | | | 40 | AM | 5 | |
| 09/16 | | | | | | | | | | | | | | | AM | 20 | |
| 09/17 | | | | | | | | | | | | | | | AM | 0 | |
| 09/18 | | | | | | | | | | | | | | | AM | 10 | |
| 09/22 | 0.3 | | | | 6.5 | 4.2 | 2.2 | 9.9 | 94 | 13 | | | | 40 | AM | 0 | |
| 09/23 | | | | | | | | | | | | | | | AM | 30 | |
| 09/24 | | | | | | | | | | | | | | | AM. | 30 | |
| 09/25 | | | | | | | | | | | | | | | AM | 10 | |
| 09/29 | 0.3 | | | | 6.5 | 4.3 | 2.7 | 9.5 | 98 | 17 | | | | 40 | AM | 3 | |
| 09/30 | | | | | | | | | | | | | | | AM | | |
| 10/01 | | | | | | | | | | | | | | | AM | 11 | |
| 10/02 | | | | | | | | | | | | | | | AM | 5 | |
| 10/06 | 0.3 | | | | 6.3 | 4.1 | 2.5 | 9.3 | 92 | 15 | | | | 40 | AM | 20 | |
| 10/07 | | | | | | | | | | | | | | | AM | 5 | |
| 10/09 | | | | | | | | | | | | | | | AM | 30 | |
| 10/14 | 0.3 | | | | 6.2 | 4.1 | 2.3 | 9.0 | 87 | 14 | | | | 40 | AM | 7 | |
| 10/15 | | | | | | | | | | | | | | | AM | 40 | |
| 10/16 | | | | | | | | | | | | | | | AM | 70 | |
| 10/20 | 0.3 | | | | 6.5 | 4.3 | 2.6 | 9.0 | 89 | 15 | | | | 40 | AM | 28 | |
| 10/21 | | | | | | | | | | | | | | | AM | 230 | |
| 10/22 | | | | | | | | | | | | | | | AM | 10 | |

UABBIN LABORATORY RECORDS 1997
01) QUABBIN RESERVOIR @ OUTLET BUILDING

| ATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | AM/PM | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| )/23 | | | | | | | | | | | | | | | AM | 20 | 0 |
| )/27 | 0.3 | | | | 6.5 | 4.0 | 2.5 | 9.2 | 89 | 14 | | | | 40 | AM | 31 | 0 |
| )/27 | | | | | | | | | | | | | | | PM | | 0 |
| )/28 | | | | | | | | | | | | | | | AM | 50 | 0 |
| )/28 | | | | | | | | | | | | | | | PM | | 0 |
| )/29 | | | | | | | | | | | | | | | AM | 220 | 0 |
| )/29 | | | | | | | | | | | | | | | PM | | 0 |
| )/30 | | | | | | | | | | | | | | | AM | 70 | 0 |
| )/30 | | | | | | | | | | | | | | | PM | | 1 |
| )/31 | | | | | | | | | | | | | | | AM | | 0 |
| )/31 | | | | | | | | | | | | | | | PM | | 1 |
| /01 | | | | | | | | | | | | | | | PM | | 0 |
| /02 | | | | | | | | | | | | | | | PM | | 0 |
| /03 | 0.3 | 5 | 6.6 | 9.4 | 6.3 | 4.0 | 2.3 | 8.8 | 82 | 12 | 21 | 10 | 0.04 | 40 | AM | 49 | 2 |
| /03 | | | | | | | | | | | | | | | PM | | 2 |
| /04 | | | | | | | | | | | | | | | AM | 69 | 1 |
| /04 | | | | | | | | | | | | | | | PM | | 0 |
| /05 | | | | | | | | | | | | | | | AM | 4 | 0 |
| /05 | | | | | | | | | | | | | | | PM | | 0 |
| /06 | | | | | | | | | | | | | | | AM | 30 | 0 |
| /06 | | | | | | | | | | | | | | | PM | | 0 |
| /07 | | | | | | | | | | | | | | | AM | 20 | 2 |
| /08 | | | | | | | | | | | | | | | PM | | 1 |
| /12 | 0.3 | | | | 6.4 | 4.1 | 2.6 | 9.9 | 90 | 11 | | | | 40 | AM | 19 | 0 |
| /12 | | | | | | | | | | | | | | | PM | | 0 |
| /13 | | | | | | | | | | | | | | | AM | 46 | 0 |
| /13 | | | | | | | | | | | | | | | AM | | 0 |
| /13 | | | | | | | | | | | | | | | PM | | 0 |
| /14 | | | | | | | | | | | | | | | AM | | 0 |
| /14 | | | | | | | | | | | | | | | PM | | 0 |
| /15 | | | | | | | | | | | | | | | PM | | 2 |
| /16 | | | | | | | | | | | | | | | PM | | 0 |
| /17 | 0.3 | | | | 6.4 | 4.1 | 2.5 | 9.7 | 86 | 10 | | | | 40 | AM | 30 | 2 |
| /17 | | | | | | | | | | | | | | | PM | | 1 |
| /18 | | | | | | | | | | | | | | | AM | 21 | 2 |
| /18 | | | | | | | | | | | | | | | PM | | 1 |
| /19 | | | | | | | | | | | | | | | AM | 27 | 0 |
| /19 | | | | | | | | | | | | | | | PM | | 0 |
| /20 | | | | | | | | | | | | | | | AM | 30 | 0 |
| /20 | | | | | | | | | | | | | | | PM | | 0 |
| /21 | | | | | | | | | | | | | | | AM | | 0 |
| /21 | | | | | | | | | | | | | | | PM | | 0 |
| /22 | | | | | | | | | | | | | | | PM | | 1 |
| /23 | | | | | | | | | | | | | | | PM | | 0 |
| /24 | 0.3 | | | | 6.4 | 4.2 | 2.9 | 9.7 | 84 | 9 | | | | 40 | AM | 33 | 0 |
| /24 | | | | | | | | | | | | | | | PM | | 0 |
| /25 | | | | | | | | | | | | | | | AM | 11 | 0 |
| /25 | | | | | | | | | | | | | | | PM | | 0 |
| /28 | | | | | | | | | | | | | | | AM | 5 | 1 |
| /30 | | | | | | | | | | | | | | | PM | | 1 |
| 2/01 | 0.3 | | | | 6.4 | 4.1 | 2.6 | 10.0 | 87 | 9 | | | | 42 | AM | 16 | 1 |
| 2/01 | | | | | | | | | | | | | | | PM | | 1 |
| 2/02 | | | | | | | | | | | | | | | AM | 14 | 2 |
| 2/02 | | | | | | | | | | | | | | | PM | | 1 |
| 2/03 | | | | | | | | | | | | | | | AM | 14 | 6 |

QUABBIN LABORATORY RECORDS 1997
(201) QUABBIN RESERVOIR @ OUTLET BUILDING

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | AM/PM | TOTCOLI | FECC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12/03 | | | | | | | | | | | | | | | PM | | 1 |
| 12/04 | | | | | | | | | | | | | | | AM | 11 | 1 |
| 12/04 | | | | | | | | | | | | | | | PM | | 0 |
| 12/05 | | | | | | | | | | | | | | | AM | | 0 |
| 12/05 | | | | | | | | | | | | | | | PM | | 0 |
| 12/06 | | | | | | | | | | | | | | | PM | | 1 |
| 12/07 | | | | | | | | | | | | | | | PM | | 0 |
| 12/08 | 0.3 | | | | 6.4 | 4.0 | 2.5 | 10.2 | 86 | 8 | | | | 40 | AM | 11 | 1 |
| 12/08 | | | | | | | | | | | | | | | PM | | 0 |
| 12/09 | | | | | | | | | | | | | | | AM | 11 | 0 |
| 12/09 | | | | | | | | | | | | | | | PM | | 0 |
| 12/10 | | | | | | | | | | | | | | | AM | 7 | 1 |
| 12/10 | | | | | | | | | | | | | | | PM | | 0 |
| 12/11 | | | | | | | | | | | | | | | AM | 4 | 0 |
| 12/11 | | | | | | | | | | | | | | | PM | | 0 |
| 12/12 | | | | | | | | | | | | | | | AM | | 0 |
| 12/12 | | | | | | | | | | | | | | | PM | | 0 |
| 12/13 | | | | | | | | | | | | | | | PM | | 0 |
| 12/14 | | | | | | | | | | | | | | | PM | | 0 |
| 12/15 | 0.3 | | | | 6.4 | 4.1 | 2.3 | 10.5 | 84 | 6 | | | | 40 | AM | 3 | 1 |
| 12/15 | | | | | | | | | | | | | | | PM | | 0 |
| 12/16 | | | | | | | | | | | | | | | AM | 1 | 0 |
| 12/16 | | | | | | | | | | | | | | | PM | | 0 |
| 12/17 | | | | | | | | | | | | | | | AM | 6 | 0 |
| 12/17 | | | | | | | | | | | | | | | PM | | 0 |
| 12/18 | | | | | | | | | | | | | | | AM | 6 | 0 |
| 12/18 | | | | | | | | | | | | | | | PM | | 0 |
| 12/19 | | | | | | | | | | | | | | | AM | | 0 |
| 12/20 | | | | | | | | | | | | | | | PM | | 0 |
| 12/21 | | | | | | | | | | | | | | | PM | | 0 |
| 12/22 | 0.3 | | | | 6.5 | 4.0 | 2.5 | 10.7 | 86 | 6 | | | | 40 | AM | 6 | 0 |
| 12/22 | | | | | | | | | | | | | | | PM | | 0 |
| 12/23 | | | | | | | | | | | | | | | AM | 3 | 0 |
| 12/23 | | | | | | | | | | | | | | | PM | | 0 |
| 12/26 | | | | | | | | | | | | | | | PM | | 0 |
| 12/27 | | | | | | | | | | | | | | | PM | | 0 |
| 12/28 | | | | | | | | | | | | | | | PM | | 0 |
| 12/29 | 0.3 | | | | 6.5 | 4.2 | 2.6 | 11.0 | 89 | 6 | | | | 40 | AM | 1 | 0 |
| 12/29 | | | | | | | | | | | | | | | PM | | 0 |
| 12/30 | | | | | | | | | | | | | | | AM | 9 | 0 |
| 12/30 | | | | | | | | | | | | | | | PM | | 2 |
| AVG. | 0.3 | 5.0 | 6.0 | 10.6 | 6.5 | 4.1 | 2.5 | 11.0 | 94 | 9 | 29 | 19 | 0.03 | 41 | | 9 | 1 |
| MAX. | 0.4 | 5.0 | 6.6 | 11.1 | 6.7 | 4.4 | 2.9 | 12.6 | 107 | 17 | 33 | 25 | 0.04 | 43 | | 230 | 6 |
| MIN. | 0.2 | 5.0 | 5.2 | 9.4 | 6.2 | 3.9 | 1.9 | 8.6 | 80 | 2 | 21 | 10 | 0.03 | 40 | | 0 | 0 |

QUABBIN LABORATORY RECORDS 1997
211) WEST BR. OF SWIFT RIVER -- RT. 202

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/13 | 0.3 | | | | 6.1 | 3.7 | 1.9 | 12.8 | 90 | 1 | | | | 50 | 90 | 0 |
| 01/27 | 0.3 | | | | 6.0 | 3.6 | 1.5 | 12.9 | 89 | 0 | | | | 52 | 45 | 0 |
| 02/10 | 0.3 | 12 | 10.0 | 9.5 | 6.1 | 3.6 | 1.6 | 13.0 | 89 | 0 | 39 | 26 | 0.06 | 52 | 60 | 0 |
| 02/24 | 0.3 | | | | 5.9 | 3.4 | 1.0 | 13.1 | 90 | 0 | | | | 42 | 55 | 1 |
| 03/10 | 0.3 | | | | 6.1 | 3.4 | 1.2 | 13.2 | 91 | 0 | | | | 47 | 70 | 0 |
| 03/24 | 0.3 | | | | 6.1 | 4.1 | 2.1 | 13.1 | 90 | 0 | | | | 57 | 39 | 2 |
| 04/07 | 0.3 | | | | 6.0 | 3.3 | 1.6 | 11.8 | 93 | 5 | | | | 40 | 35 | 0 |
| 04/22 | 0.3 | | | | 6.1 | 3.4 | 1.7 | 11.8 | 93 | 5 | | | | 43 | 80 | 1 |
| 05/05 | 0.3 | 20 | 8.3 | 11.2 | 6.1 | 2.9 | 0.9 | 11.2 | 93 | 7 | 39 | 25 | 0.06 | 42 | 70 | 1 |
| 05/19 | 0.4 | | | | 6.3 | 4.6 | 2.8 | 10.2 | 89 | 9 | | | | 53 | 60 | 0 |
| 06/02 | 0.3 | | | | 6.4 | 3.9 | 2.4 | 9.6 | 89 | 12 | | | | 52 | 65 | 21 |
| 06/16 | 0.3 | | | | 6.6 | 6.0 | 3.9 | 9.5 | 88 | 12 | | | | 70 | 660 | 11 |
| 06/30 | 0.3 | | | | 6.6 | 6.9 | 4.9 | 8.2 | 83 | 16 | | | | 82 | 210 | 17 |
| 07/14 | 0.3 | | | | 6.5 | 6.1 | 4.1 | 8.3 | 88 | 18 | | | | 63 | 500 | 55 |
| 07/28 | 0.3 | | | | 6.5 | 7.2 | 5.0 | 8.6 | 91 | 18 | | | | 77 | 270 | 20 |
| 08/11 | 0.3 | 15 | 15.8 | 15.7 | 6.6 | 8.2 | 6.4 | 8.8 | 89 | 16 | 60 | 47 | 0.12 | 80 | 250 | 20 |
| 08/25 | 0.3 | | | | 6.2 | 4.4 | 2.9 | 9.2 | 91 | 15 | | | | 48 | 400 | 50 |
| 09/08 | 0.3 | | | | 6.6 | 7.1 | 5.0 | 8.8 | 87 | 15 | | | | 75 | 700 | 50 |
| 09/22 | 0.3 | | | | 6.6 | 7.0 | 4.7 | 9.8 | 83 | 8 | | | | 70 | 370 | 60 |
| 10/06 | 0.3 | | | | 6.6 | 5.2 | 3.0 | 10.0 | 89 | 10 | | | | 52 | 100 | 8 |
| 10/20 | 0.3 | | | | 6.4 | 6.0 | 4.0 | 11.0 | 89 | 6 | | | | 62 | 320 | 1 |
| 11/03 | 0.4 | 33 | 6.1 | 11.6 | 5.7 | 2.7 | 0.6 | 10.4 | 90 | 9 | 40 | 15 | 0.12 | 40 | 600 | 10 |
| 11/17 | 0.4 | | | | 5.9 | 3.0 | 1.4 | 12.7 | 90 | 1 | | | | 43 | 120 | 3 |
| 12/01 | 0.4 | | | | 5.7 | 2.1 | 0.1 | 12.6 | 94 | 3 | | | | 42 | 75 | 20 |
| 12/15 | 0.4 | | | | 6.1 | 4.0 | 2.1 | 12.6 | 87 | 0 | | | | 58 | 110 | 0 |
| 12/29 | 0.3 | | | | 6.1 | 3.4 | 1.6 | 12.8 | 88 | 0 | | | | 52 | 80 | 2 |
| AVG. | 0.3 | 20 | 10.1 | 12.0 | 6.2 | 4.6 | 2.6 | 11.0 | 89 | 7 | 45 | 28 | 0.09 | 56 | 209 | 14 |
| MAX. | 0.4 | 33 | 15.8 | 15.7 | 6.6 | 8.2 | 6.4 | 13.2 | 94 | 18 | 60 | 47 | 0.12 | 82 | 700 | 60 |
| MIN. | 0.3 | 12 | 6.1 | 9.5 | 5.7 | 2.1 | 0.1 | 8.2 | 83 | 0 | 39 | 15 | 0.06 | 40 | 35 | 0 |

QUABBIN LABORATORY RECORDS 1997
(213) MIDDLE BR. OF SWIFT RIVER @ GATE #30

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/13 | 0.4 | | | | 6.2 | 6.3 | 4.4 | 11.3 | 80 | 1 | | | | 68 | 85 | |
| 01/27 | 0.4 | | | | 6.1 | 6.3 | 4.3 | 10.9 | 75 | 0 | | | | 67 | 60 | |
| 02/10 | 0.4 | 17 | 14.0 | 11.1 | 6.2 | 5.5 | 3.9 | 11.2 | 77 | 0 | 50 | 37 | 0.10 | 70 | 70 | |
| 02/24 | 0.4 | | | | 6.2 | 5.3 | 2.7 | 11.2 | 77 | 0 | | | | 62 | 60 | |
| 03/10 | 0.4 | | | | 6.2 | 5.1 | 3.1 | 11.6 | 82 | 1 | | | | 67 | 90 | |
| 03/24 | 0.4 | | | | 6.2 | 5.4 | 3.4 | 11.2 | 79 | 1 | | | | 72 | 50 | |
| 04/07 | 0.3 | | | | 6.1 | 4.6 | 2.6 | 10.1 | 84 | 7 | | | | 55 | 70 | |
| 04/22 | 0.4 | | | | 6.2 | 5.3 | 3.2 | 8.9 | 74 | 7 | | | | 70 | 50 | |
| 05/05 | 0.5 | 35 | 12.8 | 12.7 | 6.3 | 5.8 | 4.0 | 8.3 | 72 | 9 | 47 | 33 | 0.12 | 58 | 55 | 1 |
| 05/19 | 1.0 | | | | 6.3 | 8.2 | 6.5 | 7.0 | 65 | 12 | | | | 80 | 50 | 1 |
| 06/02 | 0.9 | | | | 6.3 | 9.1 | 7.4 | 6.0 | 61 | 16 | | | | 70 | 100 | 4 |
| 06/16 | 1.2 | | | | 6.4 | 13.3 | 11.5 | 5.0 | 53 | 18 | | | | 88 | 220 | 2 |
| 06/30 | 1.2 | | | | 6.5 | 16.8 | 14.6 | 4.8 | 54 | 21 | | | | 92 | 150 | 2 |
| 07/14 | 1.0 | | | | 6.3 | 11.3 | 9.2 | 3.8 | 43 | 22 | | | | 68 | 90 | 1 |
| 07/28 | 1.2 | | | | 6.4 | 16.5 | 14.2 | 4.5 | 50 | 21 | | | | 88 | 40 | |
| 08/11 | 1.0 | 75 | 15.4 | 15.4 | 6.4 | 15.5 | 13.4 | 3.8 | 43 | 21 | 75 | 49 | 1.00 | 83 | 50 | |
| 08/25 | 0.8 | | | | 6.1 | 10.1 | 8.4 | 5.4 | 56 | 17 | | | | 63 | 70 | |
| 09/08 | 0.7 | | | | 6.3 | 13.8 | 12.0 | 5.0 | 52 | 17 | | | | 80 | 200 | 2 |
| 09/22 | 0.8 | | | | 6.4 | 14.7 | 12.3 | 5.6 | 53 | 13 | | | | 88 | 100 | 1 |
| 10/06 | 0.7 | | | | 6.2 | 12.8 | 11.0 | 5.3 | 49 | 12 | | | | 77 | 100 | 1 |
| 10/20 | 0.7 | | | | 6.3 | 13.7 | 11.5 | 7.1 | 60 | 8 | | | | 82 | 90 | |
| 11/03 | 0.7 | 55 | 8.6 | 15.0 | 6.0 | 6.3 | 4.2 | 6.3 | 55 | 9 | 56 | 27 | 0.28 | 62 | 500 | 10 |
| 11/17 | 0.6 | | | | 6.0 | 7.0 | 5.1 | 8.5 | 62 | 2 | | | | 62 | 50 | |
| 12/01 | 0.6 | | | | 6.0 | 7.0 | 5.3 | 10.6 | 75 | 1 | | | | 62 | 90 | 3 |
| 12/15 | 0.6 | | | | 6.0 | 7.7 | 5.7 | 9.6 | 68 | 1 | | | | 68 | 100 | |
| 12/29 | 0.5 | | | | 6.0 | 6.9 | 5.1 | 10.9 | 75 | 0 | | | | 63 | 55 | |
| AVG. | 0.7 | 46 | 12.7 | 13.6 | 6.2 | 9.2 | 7.3 | 7.8 | 64 | 9 | 57 | 37 | 0.38 | 72 | 102 | |
| MAX | 1.2 | 75 | 15.4 | 15.4 | 6.5 | 16.8 | 14.6 | 11.6 | 84 | 22 | 75 | 49 | 1.00 | 92 | 500 | 10 |
| MIN. | 0.3 | 17 | 8.6 | 11.1 | 6.0 | 4.6 | 2.6 | 3.8 | 43 | 0 | 47 | 27 | 0.10 | 55 | 40 | |

QUABBIN LABORATORY RECORDS 1997
216) EAST BR. OF SWIFT RIVER @ RT. 32A

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/13 | 0.4 | | | | 6.4 | 4.5 | 2.5 | 12.8 | 90 | 1 | | | | 58 | 90 | 0 |
| 1/27 | 0.4 | | | | 6.3 | 4.9 | 2.7 | 13.1 | 90 | 0 | | | | 63 | 50 | 12 |
| 2/10 | 0.4 | 27 | 13.4 | 10.7 | 6.3 | 5.0 | 3.5 | 13.2 | 91 | 0 | 48 | 31 | 0.13 | 65 | 55 | 0 |
| 2/24 | 0.5 | | | | 6.3 | 4.7 | 2.4 | 13.0 | 92 | 1 | | | | 52 | 45 | 2 |
| 3/10 | 0.4 | | | | 6.4 | 4.4 | 2.6 | 12.6 | 89 | 1 | | | | 55 | 36 | 11 |
| 3/24 | 0.4 | | | | 6.4 | 4.7 | 2.7 | 13.1 | 92 | 1 | | | | 63 | 45 | 5 |
| 4/07 | 0.4 | | | | 6.2 | 3.3 | 1.7 | 11.8 | 95 | 6 | | | | 48 | 75 | 1 |
| 4/22 | 0.4 | | | | 6.3 | 3.3 | 1.7 | 11.2 | 95 | 8 | | | | 48 | 55 | 0 |
| 5/05 | 0.5 | 42 | 10.6 | 14.2 | 6.4 | 4.3 | 2.3 | 10.8 | 96 | 10 | 44 | 25 | 0.16 | 50 | 80 | 2 |
| 5/19 | 0.6 | | | | 6.5 | 5.3 | 3.3 | 9.8 | 91 | 12 | | | | 52 | 60 | 7 |
| 6/02 | 0.6 | | | | 6.7 | 5.6 | 4.1 | 9.3 | 94 | 16 | | | | 52 | 70 | 5 |
| 6/16 | 0.5 | | | | 6.8 | 7.3 | 5.6 | 9.4 | 93 | 15 | | | | 62 | 420 | 8 |
| 6/30 | 0.5 | | | | 6.9 | 7.2 | 5.2 | 8.6 | 94 | 20 | | | | 62 | 170 | 37 |
| 7/14 | 0.5 | | | | 6.8 | 7.4 | 5.6 | 8.2 | 91 | 21 | | | | 58 | 70 | 31 |
| 7/28 | 0.5 | | | | 6.8 | 8.0 | 6.1 | 8.2 | 91 | 21 | | | | 62 | 160 | 10 |
| 8/11 | 0.4 | 33 | 10.8 | 12.0 | 6.8 | 8.7 | 6.8 | 8.7 | 97 | 21 | 51 | 34 | 0.23 | 60 | 20 | 20 |
| 8/25 | 0.5 | | | | 6.8 | 7.8 | 6.2 | 9.0 | 93 | 17 | | | | 60 | 300 | 10 |
| 9/08 | 0.4 | | | | 6.9 | 9.1 | 7.4 | 8.8 | 91 | 17 | | | | 62 | 210 | 40 |
| 9/22 | 0.4 | | | | 6.9 | 9.4 | 7.3 | 10.4 | 92 | 10 | | | | 62 | 400 | 20 |
| 0/06 | 0.5 | | | | 6.8 | 8.6 | 6.8 | 10.0 | 93 | 12 | | | | 60 | 1,000 | 2 |
| 0/20 | 0.4 | | | | 6.8 | 9.0 | 7.1 | 11.4 | 94 | 7 | | | | 62 | 210 | 2 |
| 1/03 | 0.7 | 45 | 13.1 | 15.1 | 6.6 | 6.3 | 4.5 | 10.4 | 90 | 9 | 50 | 23 | 0.30 | 62 | 500 | 16 |
| 1/17 | 0.5 | | | | 6.4 | 4.9 | 3.4 | 12.6 | 89 | 1 | | | | 60 | 45 | 17 |
| 2/01 | 0.6 | | | | 6.4 | 5.5 | 3.7 | 12.5 | 91 | 2 | | | | 63 | 80 | 45 |
| 2/15 | 0.5 | | | | 6.4 | 6.0 | 4.3 | 12.9 | 89 | 0 | | | | 70 | 100 | 0 |
| 2/29 | 0.5 | | | | 6.4 | 6.4 | 4.8 | 13.0 | 89 | 0 | | | | 73 | 80 | 11 |
| VG. | 0.5 | 37 | 12.0 | 13.0 | 6.6 | 6.2 | 4.4 | 11.0 | 92 | 9 | 48 | 28 | 0.21 | 59 | 170 | 12 |
| AX. | 0.7 | 45 | 13.4 | 15.1 | 6.9 | 9.4 | 7.4 | 13.2 | 97 | 21 | 51 | 34 | 0.30 | 73 | 1,000 | 45 |
| IN. | 0.4 | 27 | 10.6 | 10.7 | 6.2 | 3.3 | 1.7 | 8.2 | 89 | 0 | 44 | 23 | 0.13 | 48 | 20 | 0 |

QUABBIN LABORATORY RECORDS 1997
BOAT COVE BROOK -- NEAR MOUTH

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/13 | 0.7 | | | | 6.8 | 15.7 | 14.0 | 12.0 | 85 | 1 | | | | 70 | 70 | |
| 01/27 | 1.7 | | | | 6.6 | 15.4 | 13.1 | 11.5 | 79 | 0 | | | | 68 | 39 | |
| 02/10 | 1.3 | 18 | 7.5 | 20.7 | 6.7 | 14.5 | 12.4 | 12.6 | 89 | 1 | 52 | 37 | 0.12 | 65 | 55 | |
| 02/24 | 0.8 | | | | 7.0 | 15.5 | 13.5 | 12.6 | 87 | 0 | | | | 60 | 45 | |
| 03/10 | 0.5 | | | | 6.8 | 13.3 | 11.3 | 12.6 | 91 | 2 | | | | 60 | 28 | |
| 03/24 | 0.4 | | | | 6.8 | 14.8 | 12.7 | 13.2 | 91 | 0 | | | | 60 | 14 | |
| 04/07 | 1.2 | | | | 6.8 | 12.2 | 10.2 | 11.2 | 93 | 7 | | | | 50 | 30 | |
| 04/22 | 0.4 | | | | 7.0 | 14.3 | 12.4 | 11.0 | 91 | 7 | | | | 52 | 60 | 2 |
| 05/05 | 0.5 | 42 | 5.8 | 21.2 | 7.0 | 15.3 | 13.2 | 10.6 | 88 | 7 | 57 | 34 | 0.12 | 53 | 400 | 25 |
| 05/19 | 0.5 | | | | 7.1 | 16.8 | 14.7 | 9.4 | 87 | 12 | | | | 62 | 39 | |
| 06/02 | 0.4 | | | | 7.2 | 19.4 | 17.6 | 9.2 | 91 | 15 | | | | 62 | 12 | |
| 06/16 | 0.4 | | | | 7.2 | 25.5 | 23.7 | 8.5 | 81 | 13 | | | | 72 | 720 | 10 |
| 07/14 | 0.4 | | | | 7.3 | 32.6 | 30.5 | 8.0 | 86 | 19 | | | | 82 | 550 | |
| 11/03 | 0.7 | 40 | 7.9 | 27.5 | 7.1 | 20.2 | 18.1 | 10.1 | 88 | 9 | 72 | 40 | 0.20 | 88 | 500 | |
| 11/17 | 0.7 | | | | 7.0 | 20.1 | 18.4 | 12.3 | 89 | 2 | | | | 82 | 80 | |
| 12/01 | 1.3 | | | | 6.8 | 13.2 | 11.3 | 12.4 | 93 | 3 | | | | 62 | 90 | |
| 12/15 | 0.7 | | | | 6.9 | 19.7 | 17.8 | 12.4 | 85 | 0 | | | | 80 | 85 | |
| 12/29 | 0.8 | | | | 6.8 | 17.7 | 16.1 | 12.4 | 88 | 1 | | | | 73 | 50 | |
| AVG. | 0.7 | 33 | 7.1 | 23.1 | 6.9 | 17.6 | 15.6 | 11.2 | 88 | 6 | 60 | 37 | 0.15 | 67 | 159 | |
| MAX. | 1.7 | 42 | 7.9 | 27.5 | 7.3 | 32.6 | 30.5 | 13.2 | 93 | 19 | 72 | 40 | 0.20 | 88 | 720 | 2 |
| MIN. | 0.4 | 18 | 5.8 | 20.7 | 6.6 | 12.2 | 10.2 | 8.0 | 79 | 0 | 52 | 34 | 0.12 | 50 | 12 | |

UABBIN LABORATORY RECORDS 1997
ATES BROOK @ MOUTH

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/13 | 0.3 | | | | 5.3 | 1.5 | -0.2 | 12.6 | 91 | 2 | | | | 30 | 65 | 0 |
| 1/27 | 0.2 | | | | 5.2 | 1.9 | -0.1 | 13.3 | 91 | 0 | | | | 30 | 31 | 0 |
| 2/10 | 0.3 | 8 | 4.2 | 7.9 | 5.3 | 1.7 | 0.2 | 12.6 | 89 | 1 | 28 | 20 | 0.04 | 30 | 50 | 0 |
| 2/24 | 0.4 | | | | 5.2 | 1.8 | -0.4 | 12.6 | 89 | 1 | | | | 28 | 35 | 0 |
| 3/10 | 0.3 | | | | 5.3 | 1.9 | 0.2 | 13.0 | 92 | 1 | | | | 30 | 60 | 0 |
| 3/24 | 0.3 | | | | 5.3 | 1.6 | 0.0 | 13.5 | 93 | 0 | | | | 30 | 15 | 0 |
| 4/07 | 0.3 | | | | 5.2 | 1.7 | 0.1 | 11.7 | 94 | 6 | | | | 27 | 26 | 0 |
| 4/22 | 0.2 | | | | 5.1 | 1.2 | -0.3 | 11.9 | 96 | 6 | | | | 27 | 50 | 0 |
| 5/05 | 0.2 | 10 | 5.7 | 9.4 | 5.3 | 1.7 | 0.2 | 11.8 | 98 | 7 | 29 | 19 | 0.05 | 27 | 65 | 1 |
| 5/19 | 0.3 | | | | 5.3 | 1.7 | 0.1 | 10.6 | 92 | 9 | | | | 27 | 50 | 0 |
| 6/02 | 0.2 | | | | 5.5 | 1.5 | 0.1 | 9.7 | 90 | 12 | | | | 27 | 45 | 0 |
| 6/16 | 0.2 | | | | 5.4 | 1.6 | 0.1 | 9.4 | 87 | 12 | | | | 27 | 260 | 1 |
| 6/30 | 0.2 | | | | 5.9 | 2.5 | 0.9 | 8.9 | 90 | 16 | | | | 28 | 230 | 9 |
| 7/14 | 0.2 | | | | 5.6 | 2.1 | 0.7 | 8.8 | 91 | 17 | | | | 27 | 350 | 3 |
| 7/28 | 0.2 | | | | 6.0 | 2.9 | 1.2 | 8.0 | 83 | 17 | | | | 28 | 560 | 50 |
| 8/11 | 0.2 | 7 | 4.8 | 9.1 | 5.9 | 2.8 | 1.2 | 8.6 | 91 | 18 | 39 | 29 | 0.04 | 28 | 300 | 40 |
| 8/25 | 0.2 | | | | 6.1 | 3.1 | 1.4 | 8.7 | 86 | 15 | | | | 30 | 320 | 40 |
| 9/08 | 0.3 | | | | 6.1 | 3.6 | 1.9 | 8.7 | 88 | 16 | | | | 30 | 300 | 10 |
| 9/22 | 0.2 | | | | 6.2 | 3.8 | 2.0 | 9.9 | 88 | 10 | | | | 30 | 250 | 10 |
| 10/06 | 0.2 | | | | 6.3 | 3.8 | 2.2 | 9.8 | 91 | 12 | | | | 30 | 700 | 8 |
| 10/20 | 0.2 | | | | 6.3 | 3.9 | 1.8 | 11.0 | 93 | 8 | | | | 32 | 400 | 1 |
| 11/03 | 0.3 | 27 | 6.8 | 11.9 | 5.8 | 2.3 | 0.8 | 10.6 | 92 | 9 | 37 | 20 | 0.08 | 38 | 250 | 7 |
| 11/17 | 0.2 | | | | 5.9 | 2.7 | 1.2 | 12.7 | 90 | 1 | | | | 32 | 60 | 0 |
| 12/01 | 0.3 | | | | 5.7 | 2.2 | 0.4 | 12.4 | 96 | 4 | | | | 30 | 80 | 26 |
| 12/15 | 0.3 | | | | 5.9 | 2.5 | 1.1 | 12.8 | 88 | 0 | | | | 32 | 120 | 81 |
| 12/29 | 0.3 | | | | 5.8 | 2.2 | 0.5 | 12.8 | 90 | 1 | | | | 30 | 80 | 7 |
| VG. | 0.3 | 13 | 5.4 | 9.6 | 5.7 | 2.3 | 0.7 | 11.0 | 91 | 8 | 33 | 22 | 0.05 | 29 | 183 | 11 |
| IAX. | 0.4 | 27 | 6.8 | 11.9 | 6.3 | 3.9 | 2.2 | 13.5 | 98 | 18 | 39 | 29 | 0.08 | 38 | 700 | 81 |
| IIN. | 0.2 | 7 | 4.2 | 7.9 | 5.1 | 1.2 | -0.4 | 8.0 | 83 | 0 | 28 | 19 | 0.04 | 27 | 15 | 0 |

QUABBIN LABORATORY RECORDS 1997
(211B-X) CADWELL BROOK @ MOUTH

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/13 | 0.3 | | | | 5.6 | 2.4 | 0.7 | 12.8 | 90 | 1 | | | | 38 | 65 | |
| 01/27 | 0.3 | | | | 5.6 | 2.2 | 0.5 | 13.3 | 91 | 0 | | | | 40 | 21 | |
| 02/10 | 0.4 | 8 | 6.9 | 7.0 | 5.6 | 2.1 | 0.3 | 12.8 | 88 | 0 | 33 | 23 | 0.04 | 38 | 60 | 2 |
| 02/24 | 0.4 | | | | 5.5 | 2.3 | 0.6 | 13.3 | 91 | 0 | | | | 42 | 13 | |
| 03/10 | 0.4 | | | | 5.5 | 1.9 | 0.3 | 13.2 | 91 | 0 | | | | 38 | 45 | |
| 03/24 | 0.4 | | | | 5.5 | 2.0 | 0.1 | 13.6 | 93 | 0 | | | | 38 | 4 | |
| 04/07 | 0.3 | | | | 5.4 | 1.7 | 0.1 | 11.8 | 95 | 6 | | | | 37 | 25 | |
| 04/22 | 0.3 | | | | 5.5 | 1.8 | 0.0 | 12.0 | 94 | 5 | | | | 38 | 55 | |
| 05/05 | 0.3 | 10 | 8.3 | 10.2 | 5.5 | 1.8 | 0.0 | 11.8 | 95 | 6 | 36 | 25 | 0.05 | 40 | 40 | |
| 05/19 | 0.4 | | | | 5.8 | 2.3 | 0.3 | 10.4 | 90 | 9 | | | | 33 | 36 | |
| 06/02 | 0.3 | | | | 6.1 | 2.9 | 1.3 | 9.8 | 91 | 12 | | | | 35 | 100 | |
| 06/16 | 0.3 | | | | 6.4 | 4.4 | 2.8 | 9.4 | 87 | 12 | | | | 32 | 400 | |
| 06/30 | 0.2 | | | | 6.5 | 5.0 | 3.2 | 9.1 | 90 | 15 | | | | 32 | 300 | |
| 07/14 | 0.3 | | | | 6.2 | 3.3 | 1.4 | 8.8 | 91 | 17 | | | | 42 | 450 | 2 |
| 07/28 | 0.2 | | | | 6.4 | 4.9 | 2.9 | 8.2 | 85 | 17 | | | | 37 | 340 | |
| 08/11 | 0.2 | 7 | 6.0 | 11.1 | 6.4 | 5.5 | 3.7 | 8.9 | 92 | 17 | 41 | 31 | 0.05 | 38 | 300 | |
| 08/25 | 0.2 | | | | 6.4 | 4.4 | 3.0 | 9.3 | 90 | 14 | | | | 38 | 90 | |
| 09/08 | 0.2 | | | | 6.5 | 5.5 | 3.6 | 9.0 | 89 | 15 | | | | 35 | 400 | |
| 09/22 | 0.2 | | | | 6.6 | 6.8 | 4.9 | 9.8 | 85 | 9 | | | | 37 | 300 | |
| 10/06 | 0.2 | | | | 6.5 | 5.8 | 4.0 | 10.0 | 91 | 11 | | | | 38 | 300 | 1 |
| 10/20 | 0.2 | | | | 6.6 | 7.4 | 5.9 | 11.6 | 96 | 7 | | | | 38 | 350 | |
| 11/03 | 0.3 | 25 | 8.0 | 12.1 | 6.0 | 2.4 | 0.8 | 10.8 | 94 | 9 | 42 | 24 | 0.08 | 45 | 400 | |
| 11/17 | 0.2 | | | | 6.1 | 2.8 | 1.4 | 12.9 | 91 | 1 | | | | 43 | 65 | |
| 12/01 | 0.3 | | | | 5.8 | 2.4 | 1.0 | 12.4 | 93 | 3 | | | | 40 | 90 | |
| 12/15 | 0.3 | | | | 5.9 | 2.6 | 1.2 | 12.9 | 89 | 0 | | | | 43 | 60 | |
| 12/29 | 0.3 | | | | 5.9 | 2.9 | 1.4 | 11.6 | 82 | 1 | | | | 42 | 50 | |
| AVG. | 0.3 | 13 | 7.3 | 10.1 | 6.0 | 3.4 | 1.7 | 11.1 | 91 | 7 | 38 | 26 | 0.06 | 38 | 168 | |
| MAX. | 0.4 | 25 | 8.3 | 12.1 | 6.6 | 7.4 | 5.9 | 13.6 | 96 | 17 | 42 | 31 | 0.08 | 45 | 450 | 2 |
| MIN. | 0.2 | 7 | 6.0 | 7.0 | 5.4 | 1.7 | 0.0 | 8.2 | 82 | 0 | 33 | 23 | 0.04 | 32 | 4 | |

QUABBIN LABORATORY RECORDS 1997
211A) ATHERTON BROOK AT RT. 202

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/13 | 0.3 | | | | 5.7 | 2.2 | 0.3 | 12.6 | 89 | 1 | | | | 33 | 70 | 1 |
| 1/27 | 0.2 | | | | 5.7 | 2.3 | 0.3 | 12.8 | 88 | 0 | | | | 45 | 34 | 0 |
| 2/10 | 0.2 | 12 | 8.6 | 8.9 | 5.6 | 2.1 | 0.6 | 13.2 | 91 | 0 | 36 | 26 | 0.04 | 43 | 50 | 0 |
| 2/24 | 0.3 | | | | 5.6 | 2.2 | 0.2 | 13.0 | 89 | 0 | | | | 40 | 11 | 0 |
| 3/10 | 0.2 | | | | 5.7 | 2.4 | 0.5 | 13.2 | 91 | 0 | | | | 40 | 55 | 0 |
| 3/24 | 0.3 | | | | 5.7 | 2.3 | 0.7 | 13.2 | 91 | 0 | | | | 48 | 41 | 0 |
| 4/07 | 0.2 | | | | 5.4 | 2.0 | 0.2 | 11.8 | 93 | 5 | | | | 38 | 32 | 0 |
| 4/22 | 0.2 | | | | 5.5 | 2.1 | 0.5 | 12.0 | 94 | 5 | | | | 38 | 50 | 0 |
| 5/05 | 0.3 | 23 | 8.7 | 8.7 | 5.5 | 2.1 | 0.3 | 11.0 | 89 | 6 | 36 | 23 | 0.06 | 40 | 75 | 0 |
| 5/19 | 0.3 | | | | 5.9 | 2.7 | 0.9 | 10.5 | 91 | 9 | | | | 38 | 80 | 1 |
| 6/02 | 0.2 | | | | 6.0 | 2.5 | 0.9 | 9.8 | 89 | 11 | | | | 38 | 75 | 1 |
| 6/16 | 0.2 | | | | 6.3 | 3.8 | 2.0 | 9.5 | 86 | 11 | | | | 32 | 630 | 15 |
| 6/30 | 0.2 | | | | 6.4 | 4.7 | 3.1 | 8.5 | 84 | 15 | | | | 32 | 400 | 12 |
| 7/14 | 0.3 | | | | 6.3 | 4.2 | 2.6 | 8.6 | 89 | 17 | | | | 32 | 600 | 43 |
| 7/28 | 0.3 | | | | 6.5 | 5.1 | 3.2 | 8.6 | 89 | 17 | | | | 33 | 730 | 70 |
| 8/11 | 0.2 | 30 | 5.2 | 13.5 | 6.4 | 5.4 | 3.7 | 8.6 | 89 | 17 | 42 | 30 | 0.07 | 32 | 500 | 20 |
| 8/25 | 0.3 | | | | 6.3 | 4.5 | 2.9 | 9.5 | 90 | 13 | | | | 40 | 300 | 10 |
| 9/08 | 0.2 | | | | 6.6 | 6.0 | 4.4 | 8.9 | 88 | 15 | | | | 35 | 600 | 0 |
| 9/22 | 0.2 | | | | 6.7 | 6.7 | 4.8 | 10.3 | 87 | 8 | | | | 35 | 350 | 0 |
| 0/06 | 0.2 | | | | 6.5 | 5.4 | 3.9 | 9.9 | 90 | 11 | | | | 43 | 200 | 4 |
| 0/20 | 0.2 | | | | 6.6 | 7.2 | 5.5 | 11.0 | 91 | 7 | | | | 38 | 350 | 1 |
| 1/03 | 0.3 | 45 | 13.4 | 11.4 | 5.6 | 2.4 | 0.8 | 10.6 | 92 | 9 | 52 | 26 | 0.12 | 58 | 400 | 6 |
| 1/17 | 0.3 | | | | 5.9 | 2.6 | 1.1 | 12.6 | 89 | 1 | | | | 52 | 55 | 0 |
| 2/01 | 0.3 | | | | 5.5 | 1.8 | -0.1 | 12.4 | 93 | 3 | | | | 55 | 80 | 7 |
| 2/15 | 0.3 | | | | 6.0 | 3.6 | 2.1 | 12.7 | 87 | 0 | | | | 52 | 58 | 0 |
| 2/29 | 0.2 | | | | 5.9 | 2.7 | 1.3 | 12.8 | 88 | 0 | | | | 50 | 39 | 0 |
| VG. | 0.2 | 28 | 9.0 | 10.6 | 6.0 | 3.5 | 1.8 | 11.1 | 90 | 7 | 42 | 26 | 0.07 | 41 | 226 | 7 |
| MAX. | 0.3 | 45 | 13.4 | 13.5 | 6.7 | 7.2 | 5.5 | 13.2 | 94 | 17 | 52 | 30 | 0.12 | 58 | 730 | 70 |
| MIN. | 0.2 | 12 | 5.2 | 8.7 | 5.4 | 1.8 | -0.1 | 8.5 | 84 | 0 | 36 | 23 | 0.04 | 32 | 11 | 0 |

QUABBIN LABORATORY RECORDS 1997
(212) HOP BROOK -- GATE #22

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/13 | 0.4 | | | | 6.5 | 6.2 | 4.7 | 12.7 | 90 | 1 | | | | 73 | 65 | 1 |
| 01/27 | 0.5 | | | | 6.5 | 6.1 | 4.3 | 12.9 | 89 | 0 | | | | 90 | 50 | 2 |
| 02/10 | 0.4 | 10 | 19.5 | 10.0 | 6.5 | 5.9 | 4.2 | 13.1 | 90 | 0 | 60 | 50 | 0.15 | 92 | 80 | 2 |
| 02/24 | 0.4 | | | | 6.5 | 5.8 | 3.9 | 12.9 | 89 | 0 | | | | 85 | 55 | |
| 03/10 | 0.5 | | | | 6.5 | 5.7 | 4.0 | 13.2 | 91 | 0 | | | | 85 | 45 | |
| 03/24 | 0.4 | | | | 6.5 | 6.4 | 4.6 | 13.1 | 90 | 0 | | | | 103 | 50 | 2 |
| 04/07 | 0.4 | | | | 6.3 | 4.5 | 3.0 | 11.8 | 93 | 5 | | | | 72 | 19 | |
| 04/22 | 0.4 | | | | 6.4 | 4.8 | 3.1 | 11.7 | 94 | 6 | | | | 75 | 47 | |
| 05/05 | 0.4 | 20 | 15.5 | 11.1 | 6.5 | 5.3 | 3.5 | 11.4 | 92 | 6 | 55 | 42 | 0.12 | 70 | 48 | |
| 05/19 | 0.6 | | | | 6.6 | 7.0 | 5.1 | 10.1 | 90 | 10 | | | | 80 | 70 | 2 |
| 06/02 | 0.5 | | | | 6.7 | 7.6 | 6.1 | 9.6 | 91 | 13 | | | | 82 | 80 | 4 |
| 06/16 | 0.7 | | | | 6.8 | 10.8 | 9.0 | 9.2 | 89 | 14 | | | | 100 | 180 | |
| 06/30 | 1.2 | | | | 6.9 | 13.5 | 11.7 | 8.3 | 89 | 19 | | | | 105 | 300 | 11 |
| 07/14 | 1.5 | | | | 6.8 | 13.2 | 11.3 | 8.4 | 92 | 20 | | | | 90 | 650 | 17 |
| 07/28 | 2.5 | | | | 6.9 | 14.7 | 12.9 | 8.5 | 93 | 20 | | | | 90 | 270 | 7 |
| 08/11 | 2.0 | 55 | 16.9 | 16.0 | 6.8 | 14.4 | 12.8 | 8.8 | 95 | 19 | 76 | 54 | 1.50 | 90 | 400 | 11 |
| 08/25 | 1.5 | | | | 6.8 | 11.1 | 9.7 | 9.3 | 94 | 16 | | | | 90 | 350 | 5 |
| 09/08 | 2.3 | | | | 6.8 | 13.8 | 12.0 | 8.6 | 87 | 16 | | | | 95 | 300 | 2 |
| 09/22 | 2.5 | | | | 6.9 | 13.3 | 11.6 | 10.2 | 89 | 9 | | | | 100 | 220 | 1 |
| 10/06 | 1.3 | | | | 6.7 | 9.9 | 8.3 | 10.0 | 90 | 11 | | | | 108 | 100 | 1 |
| 10/20 | 1.4 | | | | 6.8 | 11.3 | 9.6 | 11.2 | 93 | 7 | | | | 107 | 90 | |
| 11/03 | 0.8 | 45 | 19.6 | 15.8 | 6.5 | 6.5 | 4.7 | 10.3 | 89 | 9 | 71 | 47 | 0.32 | 97 | 400 | 2 |
| 11/17 | 0.5 | | | | 6.5 | 7.9 | 6.4 | 12.6 | 89 | 1 | | | | 98 | 51 | |
| 12/01 | 0.6 | | | | 6.5 | 5.8 | 4.3 | 12.6 | 91 | 2 | | | | 90 | 100 | 1 |
| 12/15 | 0.6 | | | | 6.5 | 8.4 | 7.0 | 12.5 | 86 | 0 | | | | 107 | 55 | |
| 12/29 | 0.5 | | | | 6.5 | 7.6 | 6.1 | 12.6 | 87 | 0 | | | | 112 | 41 | |
| AVG. | 1.0 | 33 | 17.9 | 13.2 | 6.6 | 8.8 | 7.1 | 11.0 | 90 | 8 | 66 | 48 | 0.52 | 92 | 158 | 2 |
| MAX. | 2.5 | 55 | 19.6 | 16.0 | 6.9 | 14.7 | 12.9 | 13.2 | 95 | 20 | 76 | 54 | 1.50 | 112 | 650 | 17 |
| MIN. | 0.4 | 10 | 15.5 | 10.0 | 6.3 | 4.5 | 3.0 | 8.3 | 86 | 0 | 55 | 42 | 0.12 | 70 | 19 | |

UABBIN LABORATORY RECORDS 1997
12-X) HOP BROOK @ MOUTH

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/13 | 0.3 | | | | 6.6 | 6.4 | 4.9 | 13.1 | 90 | 0 | | | | 70 | 55 | 2 |
| 1/27 | 0.4 | | | | 6.6 | 6.4 | 4.8 | 13.1 | 90 | 0 | | | | 82 | 35 | 1 |
| 2/10 | 0.4 | 10 | 16.0 | 9.2 | 6.6 | 5.9 | 4.1 | 13.4 | 92 | 0 | 55 | 43 | 0.12 | 80 | 65 | 1 |
| 2/24 | 0.4 | | | | 6.6 | 6.0 | 4.1 | 13.3 | 91 | 0 | | | | 77 | 40 | 4 |
| 3/10 | 0.4 | | | | 6.6 | 5.4 | 3.6 | 13.4 | 92 | 0 | | | | 77 | 40 | 0 |
| 3/24 | 0.4 | | | | 6.6 | 6.5 | 5.0 | 13.5 | 93 | 0 | | | | 87 | 50 | 8 |
| 4/07 | 0.4 | | | | 6.4 | 5.0 | 3.5 | 12.2 | 96 | 5 | | | | 68 | 17 | 3 |
| 4/22 | 0.3 | | | | 6.6 | 5.3 | 3.8 | 11.8 | 95 | 6 | | | | 70 | 36 | 1 |
| 5/05 | 0.4 | 18 | 14.4 | 11.1 | 6.6 | 5.6 | 4.1 | 11.7 | 94 | 6 | 51 | 35 | 0.12 | 65 | 37 | 2 |
| 5/19 | 0.6 | | | | 6.7 | 6.9 | 5.0 | 10.3 | 91 | 10 | | | | 72 | 50 | 12 |
| 6/02 | 0.5 | | | | 6.8 | 7.6 | 6.1 | 10.2 | 97 | 13 | | | | 75 | 27 | 14 |
| 6/16 | 0.4 | | | | 7.0 | 10.6 | 9.1 | 9.7 | 92 | 13 | | | | 88 | 170 | 7 |
| 6/30 | 0.4 | | | | 7.0 | 11.9 | 10.4 | 9.1 | 92 | 16 | | | | 90 | 120 | 13 |
| 7/14 | 0.6 | | | | 7.0 | 11.9 | 10.4 | 8.6 | 91 | 18 | | | | 80 | 60 | 4 |
| 7/28 | 1.5 | | | | 7.1 | 13.7 | 11.8 | 8.6 | 91 | 18 | | | | 78 | 90 | 10 |
| 8/11 | 0.6 | 30 | 12.7 | 15.9 | 7.0 | 13.0 | 11.2 | 9.0 | 95 | 18 | 64 | 48 | 0.50 | 78 | 200 | 0 |
| 8/25 | 0.7 | | | | 6.9 | 11.4 | 9.8 | 9.6 | 93 | 14 | | | | 87 | 150 | 0 |
| 9/08 | 0.7 | | | | 7.0 | 12.7 | 11.0 | 9.3 | 92 | 15 | | | | 82 | 100 | 0 |
| 9/22 | 0.9 | | | | 7.0 | 13.3 | 11.4 | 10.6 | 92 | 9 | | | | 90 | 150 | 10 |
| 0/06 | 0.7 | | | | 6.9 | 10.3 | 8.7 | 10.2 | 93 | 11 | | | | 100 | 300 | 4 |
| 0/20 | 0.4 | | | | 7.0 | 12.0 | 10.2 | 11.6 | 96 | 7 | | | | 92 | 120 | 0 |
| 1/03 | 0.6 | 45 | 16.9 | 16.1 | 6.6 | 6.4 | 4.7 | 10.8 | 94 | 9 | 66 | 38 | 0.30 | 92 | 250 | 14 |
| 1/17 | 0.5 | | | | 6.6 | 8.0 | 6.5 | 13.0 | 89 | 0 | | | | 92 | 56 | 18 |
| 2/01 | 0.6 | | | | 6.6 | 6.1 | 4.7 | 12.9 | 94 | 2 | | | | 85 | 100 | 27 |
| 12/15 | 0.4 | | | | 6.6 | 8.2 | 6.8 | 13.1 | 90 | 0 | | | | 98 | 39 | 4 |
| 12/29 | 0.4 | | | | 6.6 | 7.7 | 6.2 | 13.4 | 92 | 0 | | | | 100 | 37 | 2 |
| AVG. | 0.5 | 26 | 15.0 | 13.1 | 6.8 | 8.6 | 7.0 | 11.4 | 93 | 7 | 59 | 41 | 0.26 | 83 | 92 | 6 |
| MAX. | 1.5 | 45 | 16.9 | 16.1 | 7.1 | 13.7 | 11.8 | 13.5 | 97 | 18 | 66 | 48 | 0.50 | 100 | 300 | 27 |
| MIN. | 0.3 | 10 | 12.7 | 9.2 | 6.4 | 5.0 | 3.5 | 8.6 | 89 | 0 | 51 | 35 | 0.12 | 65 | 17 | 0 |

QUABBIN LABORATORY RECORDS 1997
(215A) WEST BR. OF FEVER BROOK -- WOMENS FED.

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/13 | 0.4 | | | | 5.9 | 3.4 | 1.5 | 11.8 | 83 | 1 | | | | 58 | 60 | |
| 01/27 | 0.5 | | | | 5.9 | 3.9 | 1.9 | 12.0 | 82 | 0 | | | | 62 | 50 | |
| 02/10 | 0.4 | 37 | 16.0 | 13.9 | 5.9 | 3.4 | 1.9 | 12.8 | 88 | 0 | 55 | 39 | 0.13 | 70 | 50 | |
| 02/24 | 0.4 | | | | 5.9 | 3.2 | 1.0 | 12.4 | 85 | 0 | | | | 62 | 50 | |
| 03/10 | 0.4 | | | | 5.9 | 3.4 | 1.7 | 12.2 | 86 | 1 | | | | 63 | 70 | |
| 03/24 | 0.4 | | | | 6.0 | 3.9 | 2.2 | 12.2 | 86 | 1 | | | | 67 | 50 | |
| 04/07 | 0.4 | | | | 5.7 | 2.5 | 0.9 | 11.4 | 94 | 7 | | | | 57 | 40 | |
| 04/22 | 0.4 | | | | 5.9 | 3.1 | 1.3 | 10.2 | 89 | 9 | | | | 58 | 70 | |
| 05/05 | 0.5 | 50 | 13.8 | 9.6 | 6.0 | 3.5 | 1.7 | 9.6 | 87 | 11 | 51 | 31 | 0.18 | 60 | 55 | |
| 05/19 | 0.6 | | | | 6.2 | 4.3 | 2.5 | 8.4 | 80 | 13 | | | | 62 | 50 | |
| 06/02 | 0.7 | | | | 6.2 | 5.7 | 4.3 | 7.6 | 79 | 17 | | | | 62 | 60 | |
| 06/16 | 0.9 | | | | 6.3 | 7.9 | 6.2 | 6.2 | 66 | 18 | | | | 70 | 70 | |
| 06/30 | 1.0 | | | | 6.4 | 9.2 | 7.5 | 5.6 | 63 | 21 | | | | 68 | 140 | |
| 07/14 | 0.8 | | | | 6.2 | 6.9 | 5.2 | 5.8 | 66 | 22 | | | | 63 | 70 | |
| 07/28 | 0.8 | | | | 6.2 | 8.0 | 6.0 | 5.7 | 64 | 21 | | | | 63 | 140 | |
| 08/11 | 1.0 | 60 | 13.1 | 16.1 | 6.2 | 8.2 | 6.3 | 5.7 | 64 | 21 | 65 | 38 | 0.60 | 63 | 250 | |
| 08/25 | 0.7 | | | | 6.3 | 8.6 | 6.8 | 6.7 | 69 | 17 | | | | 62 | 160 | |
| 09/08 | 0.9 | | | | 6.4 | 8.8 | 7.1 | 6.0 | 62 | 17 | | | | 62 | 300 | |
| 09/22 | 1.0 | | | | 6.4 | 8.8 | 6.9 | 7.8 | 71 | 11 | | | | 63 | 210 | |
| 10/06 | 0.7 | | | | 6.3 | 8.5 | 6.7 | 8.1 | 76 | 12 | | | | 67 | 100 | |
| 10/20 | 0.7 | | | | 6.4 | 9.5 | 7.7 | 8.5 | 72 | 8 | | | | 70 | 230 | |
| 11/03 | 0.9 | 55 | 15.8 | 12.2 | 6.2 | 6.3 | 4.8 | 8.8 | 78 | 10 | 55 | 26 | 0.53 | 63 | 240 | |
| 11/17 | 0.6 | | | | 5.9 | 4.5 | 2.8 | 11.0 | 80 | 2 | | | | 78 | 65 | |
| 12/01 | 0.6 | | | | 5.9 | 4.7 | 2.9 | 11.8 | 83 | 1 | | | | 72 | 95 | |
| 12/15 | 0.6 | | | | 6.0 | 4.9 | 3.0 | 11.3 | 80 | 1 | | | | 88 | 43 | |
| 12/29 | 0.6 | | | | 6.1 | 6.4 | 4.8 | 12.0 | 82 | 0 | | | | 90 | 80 | |
| AVG. | 0.7 | 51 | 14.7 | 13.0 | 6.1 | 5.8 | 4.1 | 9.3 | 78 | 9 | 57 | 34 | 0.36 | 66 | 108 | |
| MAX. | 1.0 | 60 | 16.0 | 16.1 | 6.4 | 9.5 | 7.7 | 12.8 | 94 | 22 | 65 | 39 | 0.60 | 90 | 300 | |
| MIN. | 0.4 | 37 | 13.1 | 9.6 | 5.7 | 2.5 | 0.9 | 5.6 | 62 | 0 | 51 | 26 | 0.13 | 57 | 40 | |

QUABBIN LABORATORY RECORDS 1997
215) EAST BR. OF FEVER BROOK -- ON WEST RD.

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/13 | 0.4 | | | | 5.6 | 2.8 | 1.1 | 11.5 | 84 | 2 | | | | 67 | 65 | 8 |
| 01/27 | 0.4 | | | | 5.6 | 2.8 | 1.0 | 11.3 | 80 | 1 | | | | 82 | 50 | 2 |
| 02/10 | 0.4 | 37 | 17.5 | 11.1 | 5.6 | 2.6 | 1.0 | 11.8 | 83 | 1 | 56 | 38 | 0.15 | 72 | 55 | 11 |
| 02/24 | 0.4 | | | | 5.7 | 3.2 | 1.5 | 11.3 | 82 | 2 | | | | 72 | 65 | 0 |
| 03/10 | 0.5 | | | | 5.7 | 2.8 | 0.9 | 11.6 | 87 | 3 | | | | 62 | 80 | 1 |
| 03/24 | 0.5 | | | | 5.7 | 2.7 | 1.2 | 11.1 | 86 | 4 | | | | 68 | 55 | 2 |
| 04/07 | 0.4 | | | | 5.6 | 2.6 | 0.9 | 10.7 | 91 | 8 | | | | 52 | 60 | 0 |
| 04/22 | 0.5 | | | | 5.6 | 2.4 | 0.9 | 9.6 | 85 | 10 | | | | 53 | 70 | 2 |
| 05/05 | 0.5 | 38 | 13.4 | 11.9 | 5.7 | 2.4 | 0.9 | 8.8 | 80 | 11 | 49 | 27 | 0.17 | 60 | 85 | 2 |
| 05/19 | 0.7 | | | | 5.8 | 3.5 | 1.7 | 8.0 | 78 | 14 | | | | 65 | 80 | 8 |
| 06/02 | 0.8 | | | | 5.9 | 3.5 | 2.0 | 6.2 | 64 | 17 | | | | 63 | | 178 |
| 06/16 | 1.0 | | | | 6.0 | 5.1 | 3.3 | 5.4 | 56 | 17 | | | | 70 | 160 | 10 |
| 06/30 | 1.2 | | | | 6.0 | 5.7 | 4.0 | 5.7 | 63 | 20 | | | | 72 | 220 | 56 |
| 07/14 | 0.6 | | | | 5.7 | 3.2 | 1.4 | 5.4 | 61 | 22 | | | | 77 | 190 | 11 |
| 07/28 | 0.7 | | | | 5.8 | 4.5 | 2.8 | 5.6 | 63 | 21 | | | | 73 | 250 | 80 |
| 08/11 | 0.8 | 65 | 18.6 | 12.3 | 6.0 | 5.4 | 3.8 | 5.2 | 56 | 19 | 64 | 43 | 0.73 | 72 | 220 | 0 |
| 08/25 | 0.8 | | | | 6.0 | 5.5 | 3.9 | 5.8 | 59 | 16 | | | | 77 | 120 | 10 |
| 09/08 | 0.8 | | | | 6.0 | 6.1 | 4.6 | 5.6 | 58 | 17 | | | | 78 | 100 | 10 |
| 09/22 | 1.3 | | | | 6.0 | 6.9 | 5.0 | 5.3 | 48 | 11 | | | | 75 | 150 | 10 |
| 10/06 | 0.7 | | | | 5.9 | 6.2 | 4.3 | 5.9 | 54 | 11 | | | | 75 | 300 | 11 |
| 10/20 | 0.8 | | | | 6.0 | 10.0 | 8.3 | 4.8 | 40 | 7 | | | | 78 | 400 | 0 |
| 11/03 | 0.6 | 55 | 22.5 | 12.9 | 6.0 | 5.6 | 4.1 | 7.8 | 69 | 10 | 66 | 38 | 0.42 | 87 | 300 | 9 |
| 11/17 | 0.5 | | | | 5.7 | 3.6 | 2.2 | 9.4 | 70 | 3 | | | | 83 | 67 | 2 |
| 12/01 | 0.5 | | | | 5.8 | 3.7 | 2.0 | 10.8 | 76 | 1 | | | | 83 | 100 | 4 |
| 12/15 | 0.5 | | | | 5.7 | 4.5 | 3.0 | 9.1 | 64 | 1 | | | | 92 | 50 | 1 |
| 12/29 | 0.5 | | | | 5.8 | 4.9 | 3.2 | 10.4 | 74 | 1 | | | | 92 | 90 | 0 |
| AVG. | 0.6 | 49 | 18.0 | 12.1 | 5.8 | 4.3 | 2.7 | 8.2 | 70 | 10 | 59 | 37 | 0.37 | 73 | 135 | 16 |
| MAX. | 1.3 | 65 | 22.5 | 12.9 | 6.0 | 10.0 | 8.3 | 11.8 | 91 | 22 | 66 | 43 | 0.73 | 92 | 400 | 178 |
| MIN. | 0.4 | 37 | 13.4 | 11.1 | 5.6 | 2.4 | 0.9 | 4.8 | 40 | 1 | 49 | 27 | 0.15 | 52 | 50 | 0 |

QUABBIN LABORATORY RECORDS 1997
(216B RAND BROOK -- RT. 32A

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/13 | 0.4 | | | | 6.6 | 6.9 | 5.2 | 13.0 | 89 | 0 | | | | 52 | 100 | 2 |
| 01/27 | 0.7 | | | | 6.6 | 7.5 | 5.9 | 13.4 | 92 | 0 | | | | 63 | 80 | 1 |
| 02/10 | 0.6 | 37 | 11.7 | 9.8 | 6.6 | 6.7 | 5.2 | 13.3 | 91 | 0 | 51 | 35 | 0.22 | 62 | 100 | 6 |
| 02/24 | 0.7 | | | | 6.7 | 6.8 | 4.9 | 13.0 | 92 | 1 | | | | 50 | 55 | |
| 03/10 | 0.7 | | | | 6.7 | 6.1 | 4.3 | 12.6 | 89 | 1 | | | | 50 | 80 | |
| 03/24 | 0.5 | | | | 6.7 | 7.0 | 5.6 | 13.2 | 93 | 1 | | | | 53 | 36 | |
| 04/07 | 0.5 | | | | 6.4 | 5.3 | 3.8 | 11.0 | 96 | 9 | | | | 40 | 50 | |
| 04/22 | 0.6 | | | | 6.6 | 5.7 | 4.0 | 11.2 | 97 | 9 | | | | 42 | 80 | |
| 05/05 | 0.7 | 38 | 10.2 | 10.0 | 6.6 | 6.6 | 5.1 | 10.8 | 96 | 10 | 43 | 24 | 0.23 | 43 | 55 | |
| 05/19 | 0.8 | | | | 6.7 | 7.7 | 5.9 | 10.2 | 93 | 11 | | | | 48 | 100 | 6 |
| 06/02 | 0.7 | | | | 6.8 | 7.8 | 6.3 | 9.2 | 91 | 15 | | | | 50 | 75 | 2 |
| 06/16 | 1.0 | | | | 6.9 | 10.5 | 8.7 | 9.4 | 93 | 15 | | | | 57 | 490 | 1 |
| 06/30 | 1.3 | | | | 7.0 | 12.1 | 10.5 | 8.2 | 90 | 20 | | | | 60 | 100 | |
| 07/14 | 1.5 | | | | 6.9 | 11.3 | 9.5 | 8.2 | 91 | 21 | | | | 52 | 200 | 1 |
| 07/28 | 1.2 | | | | 6.9 | 12.6 | 10.7 | 8.4 | 94 | 21 | | | | 60 | 100 | |
| 08/11 | 1.2 | 48 | 8.3 | 15.8 | 6.9 | 13.4 | 11.5 | 8.6 | 94 | 20 | 60 | 37 | 0.48 | 62 | 130 | |
| 08/25 | 0.9 | | | | 7.0 | 13.0 | 11.2 | 8.9 | 92 | 17 | | | | 60 | 180 | |
| 09/08 | 0.9 | | | | 7.0 | 13.7 | 11.8 | 9.0 | 93 | 17 | | | | 62 | 200 | 2 |
| 09/22 | 1.2 | | | | 7.1 | 14.0 | 12.2 | 10.2 | 93 | 11 | | | | 62 | 220 | 1 |
| 10/06 | 0.8 | | | | 6.9 | 13.6 | 12.1 | 10.0 | 93 | 12 | | | | 62 | 130 | 2 |
| 10/20 | 0.6 | | | | 6.8 | 13.3 | 11.5 | 11.5 | 97 | 8 | | | | 62 | 160 | |
| 11/03 | 0.6 | 50 | 7.7 | 15.2 | 6.8 | 9.8 | 8.3 | 10.7 | 93 | 9 | 47 | 22 | 0.22 | 53 | 300 | |
| 11/17 | 0.5 | | | | 6.7 | 9.6 | 7.8 | 12.8 | 90 | 1 | | | | 53 | 130 | |
| 12/01 | 0.7 | | | | 6.7 | 8.8 | 7.2 | 12.8 | 93 | 2 | | | | 60 | 110 | 1 |
| 12/15 | 0.6 | | | | 6.7 | 10.4 | 8.9 | 12.9 | 89 | 0 | | | | 62 | 110 | |
| 12/29 | 0.7 | | | | 6.7 | 10.5 | 8.8 | 12.8 | 88 | 0 | | | | 63 | 90 | |
| AVG. | 0.8 | 43 | 9.5 | 12.7 | 6.8 | 9.6 | 8.0 | 11.0 | 92 | 9 | 50 | 30 | 0.29 | 56 | 133 | 1 |
| MAX. | 1.5 | 50 | 11.7 | 15.8 | 7.1 | 14.0 | 12.2 | 13.4 | 97 | 21 | 60 | 37 | 0.48 | 63 | 490 | 6 |
| MIN. | 0.4 | 37 | 7.7 | 9.8 | 6.4 | 5.3 | 3.8 | 8.2 | 88 | 0 | 43 | 22 | 0.22 | 40 | 36 | |

# 7.0 WARE RIVER TRIBUTARIES

# WATER QUALITY DATA

QUABBIN LABORATORY RECORDS 1997
VARE RIVER AND TRIBUTARIES
VARE RIVER -- @ SHAFT #8

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| )1/06 | 0.4 | | | | 6.1 | 3.5 | 1.8 | 13.0 | 92 | 1 | | | | 57 | 50 | 4 |
| )1/21 | 0.4 | | | | 6.1 | 4.3 | 2.1 | 12.8 | 88 | 0 | | | | 73 | 35 | 1 |
| )2/03 | 0.5 | | | | 6.2 | 4.5 | 2.6 | 12.6 | 87 | 0 | | | | 75 | 39 | 2 |
| )2/18 | 0.4 | 35 | 16.1 | 14.4 | 6.3 | 4.5 | 2.3 | 12.8 | 88 | 0 | 54 | 39 | 0.17 | 78 | 56 | 0 |
| )3/03 | 0.4 | | | | 6.1 | 3.3 | 1.3 | 12.5 | 91 | 2 | | | | 60 | 50 | 1 |
| )3/17 | 0.4 | | | | 6.2 | 3.7 | 1.5 | 12.8 | 88 | 0 | | | | 70 | 50 | 0 |
| )3/31 | 0.5 | | | | 6.1 | 3.3 | 1.2 | 11.7 | 92 | 5 | | | | 60 | | |
| )4/14 | 0.5 | | | | 6.0 | 3.4 | 1.5 | 11.6 | 94 | 6 | | | | 53 | 50 | 1 |
| )4/28 | 0.6 | | | | 6.3 | 4.3 | 2.3 | 10.1 | 90 | 10 | | | | 60 | 80 | 11 |
| )5/12 | 0.8 | 55 | 12.2 | 13.8 | 6.4 | 4.0 | 2.0 | 10.2 | 93 | 11 | 51 | 34 | 0.38 | 60 | 50 | 1 |
| )5/27 | 1.3 | | | | 6.4 | 5.1 | 3.4 | 10.0 | 99 | 15 | | | | 60 | 50 | 11 |
| )6/09 | 1.5 | | | | 6.6 | 6.0 | 4.0 | 10.1 | 102 | 16 | | | | 65 | 100 | 10 |
| )6/23 | 1.7 | | | | 6.6 | 7.3 | 5.4 | 8.8 | 102 | 23 | | | | 72 | 120 | 0 |
| )7/07 | 1.7 | | | | 6.4 | 6.1 | 4.2 | 8.3 | 93 | 21 | | | | 63 | 160 | 30 |
| )7/21 | 2.8 | | | | 6.6 | 8.4 | 6.2 | 8.1 | 89 | 20 | | | | 62 | 100 | 20 |
| )8/04 | 2.2 | 65 | 16.6 | 10.5 | 6.7 | 7.7 | 5.8 | 8.2 | 91 | 21 | 62 | 44 | 1.10 | 80 | 150 | 40 |
| )8/18 | 1.5 | | | | 6.5 | 7.8 | 6.1 | 8.0 | 92 | 23 | | | | 68 | 160 | 50 |
| )9/02 | 1.7 | | | | 6.7 | 8.4 | 6.2 | 8.2 | 90 | 20 | | | | 67 | 160 | 70 |
| )9/15 | 1.5 | | | | 6.8 | 9.4 | 7.1 | 8.4 | 90 | 19 | | | | 80 | 90 | 10 |
| )9/29 | 1.7 | | | | 6.8 | 9.5 | 7.2 | 9.2 | 89 | 14 | | | | 82 | | |
| 10/02 | | | | | | | | | | | | | | | 0 | 3 |
| 10/14 | 1.5 | | | | 6.6 | 9.1 | 7.3 | 8.7 | 83 | 13 | | | | 78 | 30 | 0 |
| 10/27 | 1.5 | | | | 6.6 | 8.2 | 6.2 | 10.4 | 86 | 7 | | | | 72 | 31 | 0 |
| 11/12 | 0.7 | 85 | 13.6 | 12.3 | 6.1 | 3.6 | 1.4 | 11.9 | 96 | 6 | 59 | 33 | 0.53 | 67 | 250 | 20 |
| 11/24 | 0.6 | | | | 6.1 | 4.5 | 2.9 | 13.4 | 95 | 1 | | | | 80 | 480 | 0 |
| 12/08 | 0.6 | | | | 6.1 | 4.8 | 3.0 | 13.3 | 94 | 1 | | | | 73 | 32 | 3 |
| 12/22 | 0.8 | | | | 6.2 | 5.7 | 4.1 | 13.1 | 90 | 0 | | | | 80 | 100 | 1 |
| AVG. | 1.1 | 60 | 14.6 | 12.8 | 6.4 | 5.8 | 3.8 | 10.7 | 92 | 10 | 57 | 38 | 0.55 | 69 | 99 | 12 |
| MAX. | 2.8 | 85 | 16.6 | 14.4 | 6.8 | 9.5 | 7.3 | 13.4 | 102 | 23 | 62 | 44 | 1.10 | 82 | 480 | 70 |
| MIN. | 0.4 | 35 | 12.2 | 10.5 | 6.0 | 3.3 | 1.2 | 8.0 | 83 | 0 | 51 | 33 | 0.17 | 53 | 0 | 0 |

QUABBIN LABORATORY RECORDS 1997
WARE RIVER AND TRIBUTARIES
(111) QUEEN LAKE -- @ ROAD CULVERT

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/06 | 0.4 | | | | 6.5 | 5.8 | 3.9 | 12.8 | 90 | 1 | | | | 45 | 37 | [illegible] |
| 01/21 | 0.5 | | | | 6.5 | 5.7 | 3.6 | 12.8 | 90 | 1 | | | | 48 | 60 | [illegible] |
| 02/03 | 0.9 | | | | 6.5 | 5.7 | 3.6 | 12.6 | 91 | 2 | | | | 48 | 55 | [illegible] |
| 02/18 | 0.5 | 12 | 9.1 | 13.1 | 6.6 | 6.0 | 4.0 | 12.4 | 90 | 2 | 36 | 23 | 0.08 | 50 | 140 | [illegible] |
| 03/03 | 0.4 | | | | 6.5 | 5.7 | 3.8 | 12.3 | 89 | 2 | | | | 50 | 80 | 1[illegible] |
| 03/17 | 0.4 | | | | 6.5 | 5.6 | 3.7 | 12.8 | 88 | 0 | | | | 52 | 100 | 1[illegible] |
| 03/31 | 0.5 | | | | 6.3 | 4.4 | 2.6 | 12.0 | 90 | 3 | | | | 52 | | |
| 04/14 | 0.5 | | | | 6.4 | 4.6 | 2.9 | 11.6 | 94 | 6 | | | | 42 | 80 | [illegible] |
| 04/28 | 0.5 | | | | 6.5 | 5.7 | 3.7 | 10.8 | 92 | 8 | | | | 43 | 80 | |
| 05/12 | 0.5 | 12 | 8.3 | 13.7 | 6.5 | 5.1 | 3.5 | 10.6 | 96 | 11 | 39 | 26 | 0.08 | 45 | 70 | [illegible] |
| 05/27 | 0.6 | | | | 6.5 | 5.6 | 3.8 | 10.2 | 93 | 11 | | | | 45 | 65 | [illegible] |
| 06/09 | 0.7 | | | | 6.6 | 6.2 | 4.5 | 9.2 | 91 | 15 | | | | 50 | 90 | [illegible] |
| 06/23 | 1.2 | | | | 6.6 | 8.1 | 6.2 | 7.7 | 84 | 20 | | | | 52 | 300 | 2[illegible] |
| 07/07 | 0.8 | | | | 6.6 | 7.2 | 5.4 | 7.9 | 85 | 19 | | | | 50 | 200 | [illegible] |
| 07/21 | 0.9 | | | | 6.7 | 7.4 | 5.2 | 8.0 | 86 | 19 | | | | 50 | 370 | 1[illegible] |
| 08/04 | 0.9 | 18 | 9.3 | 9.9 | 6.7 | 7.1 | 5.4 | 7.5 | 82 | 20 | 35 | 22 | 0.43 | 50 | 200 | [illegible] |
| 08/18 | 0.6 | | | | 6.7 | 7.2 | 5.7 | 8.4 | 92 | 20 | | | | 50 | 430 | 1[illegible] |
| 09/02 | 0.5 | | | | 6.7 | 7.1 | 5.3 | 8.2 | 88 | 19 | | | | 50 | 250 | 6[illegible] |
| 09/15 | 0.5 | | | | 6.7 | 6.3 | 4.2 | 8.6 | 94 | 20 | | | | 48 | 300 | [illegible] |
| 09/29 | 0.6 | | | | 6.6 | 6.3 | 4.1 | 9.0 | 89 | 15 | | | | 48 | | |
| 10/02 | | | | | | | | | | | | | | | 200 | |
| 10/14 | 0.5 | | | | 6.6 | 6.7 | 4.7 | 9.4 | 91 | 14 | | | | 48 | 320 | 4 |
| 10/27 | 0.6 | | | | 6.5 | 6.3 | 4.7 | 11.0 | 93 | 8 | | | | 48 | 1,000 | 10 |
| 11/12 | 0.5 | 7 | 8.2 | 10.5 | 6.4 | 5.3 | 3.8 | 11.6 | 91 | 5 | 29 | 17 | 0.08 | 48 | 550 | |
| 11/24 | 0.4 | | | | 6.4 | 5.7 | 4.0 | 12.6 | 91 | 2 | | | | 55 | 800 | |
| 12/08 | 0.4 | | | | 6.4 | 5.5 | 3.6 | 12.8 | 90 | 1 | | | | 48 | 120 | |
| 12/22 | 0.4 | | | | 6.4 | 6.0 | 4.3 | 13.0 | 92 | 1 | | | | 50 | 130 | |
| AVG. | 0.6 | 12 | 8.7 | 11.8 | 6.5 | 6.1 | 4.2 | 10.6 | 90 | 9 | 35 | 22 | 0.17 | 49 | 241 | 1 |
| MAX. | 1.2 | 18 | 9.3 | 13.7 | 6.7 | 8.1 | 6.2 | 13.0 | 96 | 20 | 39 | 26 | 0.43 | 55 | 1,000 | 10 |
| MIN. | 0.4 | 7 | 8.2 | 9.9 | 6.3 | 4.4 | 2.6 | 7.5 | 82 | 0 | 29 | 17 | 0.08 | 42 | 37 | |

UABBIN LABORATORY RECORDS 1997
'ARE RIVER AND TRIBUTARIES
12) BURNSHIRT RIVER -- @ WILLIAMSVILLE RD.

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/06 | 0.3 | | | | 5.7 | 2.4 | 0.6 | 12.8 | 90 | 1 | | | | 42 | 55 | 0 |
| 1/21 | 0.4 | | | | 5.9 | 3.4 | 1.6 | 12.8 | 90 | 1 | | | | 57 | 45 | 0 |
| 2/03 | 0.4 | | | | 5.8 | 2.7 | 1.1 | 12.8 | 90 | 1 | | | | 57 | 41 | 0 |
| 2/18 | 0.4 | 35 | 11.4 | 13.0 | 6.0 | 3.9 | 2.1 | 12.8 | 90 | 1 | 45 | 28 | 0.14 | 58 | 45 | 0 |
| 3/03 | 0.4 | | | | 5.9 | 3.0 | 1.0 | 12.2 | 89 | 2 | | | | 50 | 55 | 1 |
| 3/17 | 0.4 | | | | 5.9 | 3.3 | 1.3 | 12.7 | 90 | 1 | | | | 53 | 36 | 0 |
| 3/31 | 0.4 | | | | 5.7 | 2.7 | 0.9 | 12.1 | 90 | 3 | | | | 48 | | |
| 4/14 | 0.4 | | | | 5.8 | 2.6 | 0.8 | 11.6 | 91 | 5 | | | | 40 | 50 | 1 |
| 4/28 | 0.4 | | | | 6.0 | 2.7 | 0.7 | 10.6 | 92 | 9 | | | | 42 | 50 | 0 |
| 5/12 | 0.5 | 43 | 7.9 | 11.0 | 6.1 | 3.0 | 1.1 | 10.4 | 94 | 11 | 43 | 28 | 0.22 | 43 | 80 | 0 |
| 5/27 | 0.6 | | | | 6.0 | 2.8 | 1.0 | 9.7 | 92 | 13 | | | | 43 | 75 | 0 |
| 6/09 | 0.7 | | | | 6.2 | 4.1 | 2.2 | 8.6 | 85 | 15 | | | | 43 | 45 | 5 |
| 6/23 | 0.8 | | | | 6.2 | 3.9 | 1.9 | 6.8 | 77 | 22 | | | | 43 | 20 | 10 |
| 7/07 | 1.2 | | | | 6.2 | 4.9 | 2.9 | 6.8 | 75 | 20 | | | | 43 | 70 | 20 |
| 7/21 | 0.9 | | | | 6.3 | 4.7 | 2.5 | 6.8 | 77 | 22 | | | | 42 | 60 | 20 |
| 8/04 | 1.0 | 65 | 8.5 | 10.6 | 6.1 | 5.2 | 3.6 | 6.2 | 70 | 22 | 41 | 21 | 0.88 | 43 | 30 | 10 |
| 8/18 | 0.9 | | | | 6.1 | 4.8 | 3.0 | 6.9 | 78 | 22 | | | | 42 | 500 | 130 |
| 9/02 | 0.8 | | | | 6.2 | 5.2 | 3.6 | 7.2 | 79 | 20 | | | | 42 | 130 | 10 |
| 9/15 | 0.9 | | | | 6.2 | 4.9 | 2.8 | 7.2 | 76 | 18 | | | | 42 | 130 | 20 |
| 9/29 | 0.8 | | | | 6.3 | 5.0 | 3.2 | 8.9 | 84 | 13 | | | | 40 | | |
| 0/02 | | | | | | | | | | | | | | | 400 | 8 |
| 0/14 | 0.8 | | | | 6.2 | 4.7 | 2.6 | 8.7 | 81 | 12 | | | | 42 | 100 | 20 |
| 0/27 | 0.7 | | | | 6.1 | 4.3 | 2.3 | 11.3 | 91 | 6 | | | | 42 | 600 | 10 |
| 1/12 | 0.7 | 48 | 9.6 | 11.3 | 6.2 | 4.3 | 2.5 | 11.4 | 89 | 5 | 35 | 14 | 0.40 | 42 | 210 | 0 |
| 1/24 | 0.5 | | | | 6.1 | 3.6 | 2.2 | 12.2 | 94 | 4 | | | | 50 | 270 | 10 |
| 2/08 | 0.5 | | | | 5.9 | 3.3 | 1.5 | 12.0 | 90 | 3 | | | | 58 | 80 | 0 |
| 2/22 | 0.4 | | | | 5.9 | 3.4 | 1.6 | 12.6 | 89 | 1 | | | | 60 | 17 | 0 |
| VG. | 0.6 | 48 | 9.4 | 11.5 | 6.0 | 3.8 | 1.9 | 10.2 | 86 | 10 | 41 | 23 | 0.41 | 46 | 128 | 11 |
| IAX. | 1.2 | 65 | 11.4 | 13.0 | 6.3 | 5.2 | 3.6 | 12.8 | 94 | 22 | 45 | 28 | 0.88 | 60 | 600 | 130 |
| IIN. | 0.3 | 35 | 7.9 | 10.6 | 5.7 | 2.4 | 0.6 | 6.2 | 70 | 1 | 35 | 14 | 0.14 | 40 | 17 | 0 |

QUABBIN LABORATORY RECORDS 1997
WARE RIVER AND TRIBUTARIES
(103) BURNSHIRT RIVER -- @ RT. 62

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/06 | 0.3 | | | | 5.7 | 2.8 | 0.9 | 12.4 | 90 | 2 | | | | 40 | 60 | [illegible] |
| 01/21 | 0.4 | | | | 5.7 | 2.6 | 0.9 | 13.4 | 92 | 0 | | | | 52 | 60 | [illegible] |
| 02/03 | 0.4 | | | | 5.8 | 3.3 | 1.3 | 13.2 | 91 | 0 | | | | 58 | 50 | |
| 02/18 | 0.4 | 32 | 12.6 | 10.1 | 6.0 | 3.1 | 0.8 | 12.8 | 88 | 0 | 44 | 30 | 0.17 | 57 | 35 | [illegible] |
| 03/03 | 0.4 | | | | 5.9 | 2.8 | 1.0 | 12.4 | 90 | 2 | | | | 48 | 70 | [illegible] |
| 03/17 | 0.4 | | | | 5.9 | 2.6 | 0.8 | 13.2 | 91 | 0 | | | | 52 | 24 | [illegible] |
| 03/31 | 0.4 | | | | 5.7 | 2.4 | 0.9 | 12.0 | 92 | 4 | | | | 43 | | |
| 04/14 | 0.4 | | | | 5.7 | 2.3 | 0.6 | 11.4 | 89 | 5 | | | | 40 | 50 | [illegible] |
| 04/28 | 0.5 | | | | 5.9 | 3.4 | 1.5 | 9.4 | 82 | 9 | | | | 42 | 70 | |
| 05/12 | 0.5 | 43 | 8.5 | 10.8 | 6.0 | 2.6 | 1.1 | 10.6 | 96 | 11 | 42 | 24 | 0.24 | 42 | 65 | |
| 05/27 | 0.7 | | | | 6.0 | 2.9 | 1.2 | 9.7 | 92 | 13 | | | | 43 | 80 | |
| 06/09 | 0.7 | | | | 6.2 | 3.4 | 1.6 | 8.8 | 85 | 14 | | | | 42 | 100 | |
| 06/23 | 0.9 | | | | 6.3 | 4.8 | 3.1 | 7.8 | 85 | 20 | | | | 42 | 230 | 2 |
| 07/07 | 0.8 | | | | 6.2 | 4.2 | 2.1 | 7.7 | 81 | 18 | | | | 40 | 110 | 3 |
| 07/21 | 1.0 | | | | 6.4 | 5.3 | 3.3 | 7.6 | 82 | 19 | | | | 40 | 170 | 2 |
| 08/04 | 0.8 | 75 | 8.6 | 8.8 | 6.4 | 4.8 | 3.0 | 7.5 | 82 | 20 | 41 | 22 | 1.18 | 40 | 200 | 2 |
| 08/18 | 0.7 | | | | 6.4 | 4.9 | 3.1 | 8.5 | 93 | 20 | | | | 40 | 300 | 7 |
| 09/02 | 0.6 | | | | 6.4 | 5.2 | 3.3 | 7.5 | 79 | 18 | | | | 40 | 210 | 1 |
| 09/15 | 0.6 | | | | 6.4 | 5.8 | 4.0 | 8.8 | 89 | 16 | | | | 40 | 250 | |
| 09/29 | 1.2 | | | | 6.3 | 6.0 | 4.1 | 9.6 | 89 | 12 | | | | 40 | | |
| 10/02 | | | | | | | | | | | | | | | 700 | |
| 10/14 | 0.5 | | | | 6.2 | 5.0 | 3.1 | 9.2 | 84 | 11 | | | | 40 | 300 | 1 |
| 10/27 | 0.7 | | | | 6.1 | 4.2 | 2.4 | 10.9 | 88 | 6 | | | | 40 | 700 | 5 |
| 11/12 | 0.5 | 47 | 9.7 | 10.8 | 5.9 | 2.8 | 1.3 | 11.4 | 88 | 4 | 39 | 17 | 0.43 | 42 | 400 | |
| 11/24 | 0.5 | | | | 5.9 | 2.8 | 1.1 | 12.8 | 93 | 2 | | | | 48 | 320 | 1 |
| 12/08 | 0.5 | | | | 5.9 | 3.4 | 1.6 | 13.0 | 92 | 1 | | | | 53 | 90 | |
| 12/22 | 0.4 | | | | 5.9 | 3.9 | 2.3 | 13.1 | 90 | 0 | | | | 58 | 110 | |
| AVG. | 0.6 | 49 | 9.9 | 10.1 | 6.0 | 3.7 | 1.9 | 10.6 | 88 | 9 | 42 | 23 | 0.51 | 45 | 190 | 1 |
| MAX. | 1.2 | 75 | 12.6 | 10.8 | 6.4 | 6.0 | 4.1 | 13.4 | 96 | 20 | 44 | 30 | 1.18 | 58 | 700 | 7 |
| MIN. | 0.3 | 32 | 8.5 | 8.8 | 5.7 | 2.3 | 0.6 | 7.5 | 79 | 0 | 39 | 17 | 0.17 | 40 | 24 | |

UABBIN LABORATORY RECORDS 1997
'ARE RIVER AND TRIBUTARIES
15) BRIGHAM POND -- @ OUTLET

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/06 | 0.4 | | | | 5.6 | 2.3 | 0.6 | 12.6 | 89 | 1 | | | | 37 | 80 | 1 |
| 1/21 | 0.4 | | | | 5.8 | 3.3 | 1.6 | 12.9 | 91 | 1 | | | | 47 | 46 | 0 |
| 2/03 | 0.4 | | | | 5.8 | 3.0 | 1.5 | 12.4 | 88 | 1 | | | | 45 | 50 | 0 |
| 2/18 | 0.4 | 40 | 10.9 | 11.1 | 6.0 | 3.5 | 1.8 | 13.2 | 93 | 1 | 41 | 23 | 0.15 | 48 | 25 | 0 |
| 3/03 | 0.5 | | | | 5.9 | 3.0 | 1.0 | 12.2 | 89 | 2 | | | | 42 | 50 | 0 |
| 3/17 | 0.4 | | | | 5.9 | 3.3 | 1.4 | 12.7 | 90 | 1 | | | | 42 | 55 | 1 |
| 3/31 | 0.5 | | | | 5.8 | 2.6 | 0.7 | 12.0 | 92 | 4 | | | | 40 | | |
| 4/14 | 0.4 | | | | 5.8 | 2.6 | 0.8 | 11.4 | 89 | 5 | | | | 33 | 75 | 21 |
| 4/28 | 0.4 | | | | 6.0 | 3.1 | 1.1 | 10.2 | 89 | 9 | | | | 38 | 41 | 2 |
| 5/12 | 0.5 | 55 | 7.4 | 11.1 | 6.1 | 3.2 | 1.3 | 10.2 | 93 | 11 | 41 | 23 | 0.17 | 38 | 50 | 1 |
| 5/27 | 0.7 | | | | 6.2 | 4.1 | 2.2 | 9.4 | 93 | 15 | | | | 40 | 65 | 0 |
| 6/09 | 0.8 | | | | 6.3 | 4.7 | 3.1 | 8.3 | 88 | 18 | | | | 40 | 32 | 1 |
| 6/23 | 1.2 | | | | 6.4 | 5.1 | 3.2 | 7.6 | 91 | 25 | | | | 42 | 80 | 0 |
| 7/07 | 1.0 | | | | 6.5 | 5.4 | 3.7 | 7.5 | 87 | 23 | | | | 42 | 60 | 10 |
| 7/21 | 1.2 | | | | 6.5 | 5.8 | 4.0 | 7.3 | 84 | 23 | | | | 40 | 50 | 20 |
| 8/04 | 1.2 | 80 | 8.0 | 10.0 | 6.5 | 5.4 | 3.8 | 6.7 | 79 | 24 | 44 | 20 | 0.88 | 42 | 80 | 0 |
| 8/18 | 1.0 | | | | 6.4 | 5.8 | 4.4 | 7.3 | 86 | 24 | | | | 40 | 40 | 10 |
| 9/02 | 1.0 | | | | 6.4 | 5.1 | 3.1 | 7.7 | 86 | 21 | | | | 40 | 70 | 0 |
| 9/15 | 0.7 | | | | 6.5 | 5.8 | 4.0 | 8.0 | 89 | 21 | | | | 40 | 220 | 0 |
| 9/29 | 0.6 | | | | 6.4 | 4.9 | 2.9 | 8.1 | 80 | 15 | | | | 40 | | |
| 0/02 | | | | | | | | | | | | | | | 90 | 5 |
| 0/14 | 0.8 | | | | 6.3 | 5.6 | 4.0 | 8.4 | 81 | 14 | | | | 40 | 80 | 0 |
| 0/27 | 1.2 | | | | 6.3 | 5.6 | 3.9 | 10.6 | 88 | 7 | | | | 40 | 120 | 10 |
| 1/12 | 0.7 | 85 | 8.4 | 12.7 | 6.0 | 4.1 | 2.3 | 10.2 | 82 | 6 | 52 | 20 | 0.40 | 42 | 240 | 0 |
| 1/24 | 0.5 | | | | 5.7 | 3.0 | 1.5 | 11.4 | 85 | 3 | | | | 42 | 280 | 0 |
| 2/08 | 0.5 | | | | 5.7 | 3.1 | 1.4 | 11.6 | 87 | 3 | | | | 43 | 27 | 1 |
| 2/22 | 0.5 | | | | 5.8 | 3.6 | 1.9 | 11.6 | 87 | 3 | | | | 48 | 31 | 0 |
| VG. | 0.7 | 65 | 8.7 | 11.2 | 6.1 | 4.1 | 2.4 | 10.1 | 88 | 11 | 45 | 22 | 0.40 | 41 | 81 | 3 |
| AX. | 1.2 | 85 | 10.9 | 12.7 | 6.5 | 5.8 | 4.4 | 13.2 | 93 | 25 | 52 | 23 | 0.88 | 48 | 280 | 21 |
| IN. | 0.4 | 40 | 7.4 | 10.0 | 5.6 | 2.3 | 0.6 | 6.7 | 79 | 1 | 41 | 20 | 0.15 | 33 | 25 | 0 |

QUABBIN LABORATORY RECORDS 1997
WARE RIVER AND TRIBUTARIES
(116) ASNACOMET POND -- @ OUTLET

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/06 | 0.3 | | | | 6.3 | 4.1 | 2.5 | 12.8 | 93 | 2 | | | | 37 | 21 | 0 |
| 01/21 | 0.3 | | | | 6.3 | 4.2 | 2.4 | 13.0 | 94 | 2 | | | | 40 | 20 | 0 |
| 02/03 | 0.3 | | | | 6.3 | 3.8 | 2.0 | 12.8 | 93 | 2 | | | | 38 | 5 | 0 |
| 02/18 | 0.3 | 10 | 6.0 | 11.5 | 6.3 | 3.9 | 1.9 | 12.9 | 94 | 2 | 25 | 12 | 0.04 | 38 | 15 | 0 |
| 03/03 | 0.3 | | | | 6.2 | 3.6 | 1.8 | 12.2 | 89 | 2 | | | | 33 | 43 | 0 |
| 03/17 | 0.3 | | | | 6.3 | 3.6 | 1.8 | 11.6 | 87 | 3 | | | | 37 | 32 | 0 |
| 03/31 | 0.3 | | | | 6.2 | 3.6 | 2.1 | 11.7 | 92 | 5 | | | | 35 | | |
| 04/14 | 0.4 | | | | 6.2 | 3.3 | 1.8 | 11.4 | 92 | 6 | | | | 32 | 21 | 0 |
| 04/28 | 0.3 | | | | 6.3 | 4.0 | 2.3 | 11.4 | 94 | 7 | | | | 33 | 27 | 0 |
| 05/12 | 0.3 | 8 | 6.2 | 11.3 | 6.3 | 3.5 | 2.0 | 10.6 | 96 | 11 | 32 | 19 | 0.05 | 32 | 21 | 0 |
| 05/27 | 0.3 | | | | 6.4 | 3.2 | 1.8 | 9.8 | 95 | 14 | | | | 32 | 40 | 0 |
| 06/09 | 0.3 | | | | 6.5 | 3.3 | 1.5 | 9.4 | 97 | 17 | | | | 32 | 55 | 0 |
| 06/23 | 1.5 | | | | 6.4 | 4.0 | 2.1 | 7.7 | 89 | 23 | | | | 32 | 10 | 6 |
| 07/07 | 0.4 | | | | 6.4 | 4.0 | 2.3 | 7.8 | 90 | 23 | | | | 32 | 7 | 4 |
| 07/21 | 0.4 | | | | 6.5 | 3.9 | 1.8 | 7.6 | 89 | 24 | | | | 32 | 60 | 1 |
| 08/04 | 0.3 | 7 | 4.9 | 13.2 | 6.5 | 4.0 | 2.5 | 6.1 | 72 | 24 | 25 | 15 | 0.05 | 32 | 11 | 2 |
| 09/02 | 0.3 | | | | 6.5 | 3.8 | 2.4 | 8.2 | 91 | 21 | | | | 32 | 23 | 2 |
| 11/24 | 1.2 | | | | 6.1 | 3.2 | 1.8 | 10.4 | 82 | 5 | | | | 33 | 110 | 0 |
| 12/08 | 0.4 | | | | 6.2 | 4.1 | 2.6 | 11.6 | 87 | 3 | | | | 33 | 50 | 0 |
| 12/22 | 0.4 | | | | 6.2 | 4.1 | 2.7 | 11.8 | 88 | 3 | | | | 37 | 16 | 0 |
| AVG. | 0.4 | 8 | 5.7 | 12.0 | 6.3 | 3.8 | 2.1 | 10.5 | 90 | 10 | 27 | 15 | 0.05 | 34 | 31 | 1 |
| MAX. | 1.5 | 10 | 6.2 | 13.2 | 6.5 | 4.2 | 2.7 | 13.0 | 97 | 24 | 32 | 19 | 0.05 | 40 | 110 | 6 |
| MIN. | 0.3 | 7 | 4.9 | 11.3 | 6.1 | 3.2 | 1.5 | 6.1 | 72 | 2 | 25 | 12 | 0.04 | 32 | 5 | 0 |

(116A) ASNACOMET POND --@ BEACH

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07/07 | 0.4 | | | | 6.4 | 4.0 | 2.1 | 7.8 | 93 | 25 | | | | 32 | 13 | 3 |
| 07/21 | 0.4 | | | | 6.5 | 3.6 | 1.9 | 7.7 | 90 | 24 | | | | 32 | 4 | 2 |
| 08/04 | 0.5 | 7 | 4.9 | 10.4 | 6.4 | 3.8 | 2.3 | | | | | | 0.07 | 33 | 36 | 3 |
| 08/18 | 0.3 | | | | 6.4 | 3.5 | 1.9 | 8.2 | 95 | 23 | | | | 33 | 23 | 17 |
| AVG. | 0.4 | | | | 6.4 | 3.7 | 2.1 | 7.9 | 93 | 24 | | | | 33 | 19 | 6 |
| MAX. | 0.5 | | | | 6.5 | 4.0 | 2.3 | 8.2 | 95 | 25 | | | | 33 | 36 | 17 |
| MIN. | 0.3 | | | | 6.4 | 3.5 | 1.9 | 7.7 | 90 | 23 | | | | 32 | 4 | 2 |

UABBIN LABORATORY RECORDS 1997
'ARE RIVER AND TRIBUTARIES
07) WEST BR. OF WARE RIVER -- @ RT. 62

| ATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/06 | 0.4 | | | | 5.6 | 2.4 | 0.5 | 11.8 | 83 | 1 | | | | 45 | 50 | 0 |
| 1/21 | 0.4 | | | | 5.7 | 3.0 | 1.3 | 11.2 | 77 | 0 | | | | 52 | 55 | 1 |
| 2/03 | 0.4 | | | | 6.0 | 3.4 | 1.9 | 11.2 | 79 | 1 | | | | 60 | 55 | 0 |
| 2/18 | 0.4 | 40 | 16.1 | 14.5 | 5.9 | 3.5 | 1.8 | 11.6 | 80 | 0 | 48 | 27 | 0.20 | 63 | 98 | 2 |
| 3/03 | 0.5 | | | | 5.9 | 3.5 | 1.6 | 11.5 | 84 | 2 | | | | 52 | 80 | 0 |
| 3/17 | 0.4 | | | | 5.9 | 3.7 | 1.9 | 12.0 | 82 | 0 | | | | 63 | 40 | 0 |
| 3/31 | 0.4 | | | | 5.8 | 2.9 | 1.0 | 10.8 | 83 | 4 | | | | 48 | | |
| 4/14 | 0.4 | | | | 5.8 | 3.0 | 1.1 | 10.6 | 83 | 5 | | | | 40 | 70 | 3 |
| 4/28 | 0.5 | | | | 5.8 | 3.5 | 1.5 | 8.3 | 70 | 8 | | | | 45 | 100 | 5 |
| 5/12 | 0.7 | 65 | 10.0 | 14.2 | 6.0 | 4.0 | 2.1 | 8.7 | 79 | 11 | 47 | 28 | 0.38 | 48 | 80 | 6 |
| 5/27 | 1.3 | | | | 5.9 | 5.2 | 3.6 | 6.4 | 61 | 13 | | | | 48 | 75 | 9 |
| 6/09 | 1.5 | | | | 6.0 | 5.9 | 4.2 | 5.0 | 50 | 15 | | | | 50 | 150 | 29 |
| 6/23 | 3.0 | | | | 6.0 | 10.5 | 8.7 | 1.3 | 15 | 22 | | | | 53 | 300 | 250 |
| 7/07 | 1.7 | | | | 5.8 | 6.5 | 4.3 | 2.1 | 23 | 20 | | | | 52 | 300 | 210 |
| 7/21 | 3.3 | | | | 5.9 | 8.4 | 6.4 | 1.2 | 13 | 19 | | | | 52 | 90 | 50 |
| 8/04 | 3.8 | 140 | 14.4 | 17.1 | 6.0 | 10.2 | 8.5 | 0.8 | 9 | 20 | 66 | 37 | 3.00 | 60 | 60 | 30 |
| 8/18 | 2.8 | | | | 6.0 | 10.3 | 8.4 | 0.9 | 10 | 21 | | | | 67 | 1,000 | 700 |
| 9/02 | 2.8 | | | | 5.9 | 11.1 | 9.0 | 0.4 | 5 | 19 | | | | 60 | 400 | 150 |
| 9/15 | 3.5 | | | | 5.9 | 13.9 | 11.4 | 0.2 | 2 | 17 | | | | 62 | 300 | 160 |
| 9/29 | 3.8 | | | | 5.9 | 13.5 | 11.5 | 1.2 | 11 | 11 | | | | 70 | | |
| 0/02 | | | | | | | | | | | | | | | 400 | 20 |
| 0/14 | 2.8 | | | | 5.9 | 12.0 | 9.7 | 0.8 | 8 | 11 | | | | 68 | 130 | 0 |
| 0/27 | 1.8 | | | | 5.7 | 5.1 | 2.9 | 3.6 | 29 | 6 | | | | 70 | 220 | 10 |
| 1/12 | 0.6 | 85 | 11.1 | 13.2 | 5.7 | 3.5 | 1.7 | 7.1 | 55 | 4 | 58 | 28 | 0.48 | 58 | 150 | 0 |
| 1/24 | 0.6 | | | | 5.7 | 4.4 | 3.0 | 8.6 | 61 | 1 | | | | 63 | 50 | 0 |
| 2/08 | 0.6 | | | | 5.7 | 3.5 | 1.8 | 8.9 | 63 | 1 | | | | 58 | 41 | 0 |
| 2/22 | 0.5 | | | | 5.6 | 4.7 | 3.0 | 8.2 | 56 | 0 | | | | 63 | 65 | 1 |
| VG. | 1.5 | 82 | 12.9 | 14.8 | 5.8 | 6.2 | 4.3 | 6.3 | 49 | 9 | 55 | 30 | 1.02 | 57 | 174 | 65 |
| AX. | 3.8 | 140 | 16.1 | 17.1 | 6.0 | 13.9 | 11.5 | 12.0 | 84 | 22 | 66 | 37 | 3.00 | 70 | 1,000 | 700 |
| IN. | 0.4 | 40 | 10.0 | 13.2 | 5.6 | 2.4 | 0.5 | 0.2 | 2 | 0 | 47 | 27 | 0.20 | 40 | 40 | 0 |

QUABBIN LABORATORY RECORDS 1997
WARE RIVER AND TRIBUTARIES
(108) EAST BR. OF WARE RIVER -- @ NEW BOSTON

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/06 | 0.4 | | | | 6.0 | 2.9 | 1.2 | 12.5 | 88 | 1 | | | | 50 | 55 | [illegible] |
| 01/21 | 0.4 | | | | 6.0 | 4.4 | 2.7 | 12.3 | 85 | 0 | | | | 62 | 43 | [illegible] |
| 02/03 | 0.4 | | | | 6.1 | 4.2 | 2.4 | 12.1 | 83 | 0 | | | | 60 | 22 | [illegible] |
| 02/18 | 0.4 | 30 | 14.8 | 14.8 | 6.2 | 4.8 | 2.9 | 12.4 | 85 | 0 | 47 | 32 | 0.18 | 68 | 69 | [illegible] |
| 03/03 | 0.5 | | | | 6.1 | 3.8 | 1.9 | 11.8 | 86 | 2 | | | | 53 | 37 | [illegible] |
| 03/17 | 0.4 | | | | 6.1 | 3.6 | 1.7 | 12.5 | 86 | 0 | | | | 60 | 23 | [illegible] |
| 03/31 | 0.4 | | | | 6.0 | 3.2 | 1.7 | 11.1 | 87 | 5 | | | | 50 | | |
| 04/14 | 0.4 | | | | 5.9 | 3.0 | 1.5 | 10.7 | 86 | 6 | | | | 47 | 50 | [illegible] |
| 04/28 | 0.5 | | | | 6.1 | 3.9 | 2.3 | 9.2 | 82 | 10 | | | | 50 | 100 | [illegible] |
| 05/12 | 0.7 | 47 | 12.3 | 7.0 | 6.2 | 4.0 | 2.5 | 9.6 | 85 | 10 | 48 | 28 | 0.30 | 52 | 100 | [illegible] |
| 05/27 | 1.2 | | | | 6.2 | 4.8 | 3.0 | 8.4 | 80 | 13 | | | | 52 | 100 | 2 |
| 06/09 | 1.3 | | | | 6.4 | 6.8 | 5.0 | 8.0 | 79 | 15 | | | | 60 | 180 | 9 |
| 06/23 | 1.5 | | | | 6.4 | 9.6 | 8.0 | 5.4 | 60 | 21 | | | | 63 | 250 | 16 |
| 07/07 | 1.2 | | | | 6.2 | 6.3 | 4.2 | 6.4 | 70 | 20 | | | | 52 | 300 | 14 |
| 07/21 | 1.8 | | | | 6.4 | 9.2 | 7.2 | 5.8 | 64 | 20 | | | | 58 | 160 | 8 |
| 08/04 | 1.5 | 75 | 13.7 | 11.9 | 6.4 | 9.7 | 8.2 | 6.4 | 71 | 21 | 57 | 34 | 1.40 | 63 | 400 | 24 |
| 08/18 | 1.3 | | | | 6.4 | 9.3 | 7.8 | 6.2 | 69 | 21 | | | | 67 | 300 | 15 |
| 09/02 | 1.0 | | | | 6.4 | 9.3 | 7.4 | 6.4 | 69 | 19 | | | | 63 | 170 | 5 |
| 09/15 | 1.2 | | | | 6.4 | 10.3 | 8.4 | 6.5 | 67 | 17 | | | | 68 | 200 | 8 |
| 09/29 | 1.3 | | | | 6.5 | 9.5 | 7.6 | 8.3 | 77 | 12 | | | | 68 | | |
| 10/02 | | | | | | | | | | | | | | | 300 | 1 |
| 10/14 | 0.9 | | | | 6.4 | 11.0 | 9.0 | 6.5 | 59 | 11 | | | | 78 | 160 | 3 |
| 10/27 | 1.2 | | | | 6.4 | 9.0 | 6.9 | 9.2 | 74 | 6 | | | | 75 | 500 | 4 |
| 11/12 | 0.6 | 85 | 14.3 | 12.7 | 6.2 | 5.3 | 3.6 | 11.0 | 85 | 4 | 62 | 31 | 0.42 | 63 | 220 | |
| 11/24 | 0.5 | | | | 6.2 | 5.5 | 3.9 | 11.5 | 81 | 1 | | | | 70 | 250 | 2 |
| 12/08 | 0.5 | | | | 6.1 | 5.3 | 3.8 | 11.6 | 80 | 0 | | | | 67 | 120 | |
| 12/22 | 0.7 | | | | 6.1 | 6.1 | 4.4 | 11.8 | 81 | 0 | | | | 70 | 60 | |
| AVG. | 0.9 | 59 | 13.8 | 11.6 | 6.2 | 6.3 | 4.6 | 9.4 | 78 | 9 | 54 | 31 | 0.58 | 61 | 167 | 4 |
| MAX. | 1.8 | 85 | 14.8 | 14.8 | 6.5 | 11.0 | 9.0 | 12.5 | 88 | 21 | 62 | 34 | 1.40 | 78 | 500 | 24 |
| MIN. | 0.4 | 30 | 12.3 | 7.0 | 5.9 | 2.9 | 1.2 | 5.4 | 59 | 0 | 47 | 28 | 0.18 | 47 | 22 | |

)UABBIN LABORATORY RECORDS 1997
/ARE RIVER AND TRIBUTARIES
05) WARE RIVER -- @ BARRE FALLS

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/06 | 0.4 | | | | 5.8 | 3.6 | 1.9 | 12.0 | 85 | 1 | | | | 58 | 60 | 12 |
| 3/03 | 0.5 | | | | 5.9 | 3.6 | 1.8 | 11.0 | 82 | 3 | | | | 65 | 50 | 1 |
| 3/31 | 0.5 | | | | 5.9 | 3.4 | 1.6 | 10.8 | 85 | 5 | | | | 62 | | |
| 4/14 | 0.5 | | | | 5.9 | 3.5 | 1.7 | 10.4 | 82 | 5 | | | | 55 | 40 | 0 |
| 4/28 | 0.7 | | | | 6.1 | 4.8 | 2.8 | 8.2 | 71 | 9 | | | | 60 | 50 | 3 |
| 5/12 | 1.2 | 70 | 14.6 | 10.2 | 6.2 | 5.3 | 3.7 | 9.4 | 85 | 11 | 58 | 37 | 0.32 | 62 | 50 | 2 |
| 5/27 | 1.7 | | | | 6.2 | 5.3 | 3.7 | 8.6 | 83 | 14 | | | | 65 | 60 | 19 |
| 6/09 | 1.7 | | | | 6.4 | 7.5 | 6.0 | 8.2 | 81 | 15 | | | | 87 | 120 | 49 |
| 6/23 | 2.5 | | | | 6.5 | 10.3 | 8.4 | 6.5 | 75 | 23 | | | | 82 | 300 | 40 |
| 7/07 | 1.7 | | | | 6.2 | 6.5 | 4.6 | 6.6 | 71 | 19 | | | | 60 | 270 | 60 |
| 7/21 | 2.3 | | | | 6.5 | 9.1 | 6.8 | 6.8 | 75 | 20 | | | | 62 | 150 | 20 |
| 8/04 | 1.8 | 65 | 21.5 | 14.6 | 6.5 | 9.6 | 8.1 | 6.8 | 79 | 23 | 77 | 53 | 1.10 | 100 | 140 | 20 |
| 8/18 | 1.8 | | | | 6.3 | 8.8 | 7.3 | 6.7 | 75 | 21 | | | | 72 | 350 | 190 |
| 9/02 | 1.7 | | | | 6.4 | 9.6 | 7.5 | 6.8 | 73 | 19 | | | | 72 | 200 | 70 |
| 9/15 | 1.7 | | | | 6.4 | 11.6 | 9.8 | 6.4 | 66 | 17 | | | | 100 | 170 | 30 |
| 9/29 | 1.8 | | | | 6.4 | 11.4 | 9.2 | 7.4 | 70 | 13 | | | | 83 | | |
| 0/02 | | | | | | | | | | | | | | | 0 | 4 |
| 0/14 | 1.7 | | | | 6.2 | 10.5 | 8.8 | 6.3 | 59 | 12 | | | | 80 | 20 | 4 |
| 0/27 | 1.7 | | | | 6.3 | 9.2 | 7.1 | 10.1 | 82 | 6 | | | | 80 | 300 | 20 |
| 1/12 | 0.6 | 85 | 16.7 | 16.0 | 5.9 | 4.0 | 2.1 | 10.4 | 80 | 4 | 69 | 38 | 0.52 | 73 | 330 | 10 |
| 1/24 | 0.5 | | | | 5.9 | 4.2 | 2.6 | 11.6 | 82 | 1 | | | | 100 | 430 | 0 |
| VG. | 1.4 | 73 | 17.6 | 13.6 | 6.2 | 7.1 | 5.3 | 8.6 | 77 | 12 | 68 | 43 | 0.65 | 74 | 163 | 29 |
| IAX. | 2.5 | 85 | 21.5 | 16.0 | 6.5 | 11.6 | 9.8 | 12.0 | 85 | 23 | 77 | 53 | 1.10 | 100 | 430 | 190 |
| IIN. | 0.4 | 65 | 14.6 | 10.2 | 5.8 | 3.4 | 1.6 | 6.3 | 59 | 1 | 58 | 37 | 0.32 | 55 | 0 | 0 |

QUABBIN LABORATORY RECORDS 1997
WARE RIVER AND TRIBUTARIES
(104) CANESTO + NATTY BROOKS AT JUNCTION -- @ RT. 62

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/06 | 0.3 | | | | 5.9 | 2.3 | 0.7 | 12.6 | 89 | 1 | | | | 50 | 50 | |
| 01/21 | 0.4 | | | | 6.0 | 3.3 | 1.6 | 13.4 | 92 | 0 | | | | 60 | 55 | |
| 02/03 | 0.4 | | | | 6.1 | 3.6 | 2.0 | 12.2 | 84 | 0 | | | | 63 | 29 | |
| 02/18 | 0.5 | 32 | 13.4 | 12.6 | 6.2 | 3.9 | 2.1 | 13.4 | 92 | 0 | 48 | 32 | 0.25 | 63 | 30 | |
| 03/03 | 0.4 | | | | 6.1 | 3.4 | 1.6 | 12.4 | 88 | 1 | | | | 50 | 50 | |
| 03/17 | 0.4 | | | | 6.2 | 3.9 | 2.4 | 13.4 | 92 | 0 | | | | 60 | 55 | |
| 03/31 | 0.5 | | | | 6.0 | 3.2 | 1.8 | 12.0 | 92 | 4 | | | | 48 | | |
| 04/14 | 0.4 | | | | 6.0 | 2.7 | 1.1 | 12.1 | 93 | 4 | | | | 43 | 65 | |
| 04/28 | 0.5 | | | | 6.1 | 3.1 | 1.4 | 10.8 | 92 | 8 | | | | 48 | 80 | |
| 05/12 | 0.6 | 47 | 10.6 | 9.3 | 6.2 | 3.1 | 1.5 | 10.8 | 96 | 10 | 47 | 30 | 0.37 | 48 | 50 | |
| 05/27 | 0.8 | | | | 6.3 | 4.2 | 2.6 | 10.4 | 94 | 11 | | | | 48 | 70 | |
| 06/09 | 1.5 | | | | 6.5 | 5.4 | 3.5 | 9.6 | 89 | 12 | | | | 50 | 80 | 1 |
| 06/23 | 2.0 | | | | 6.6 | 8.2 | 6.4 | 8.1 | 87 | 19 | | | | 52 | 250 | 7 |
| 07/07 | 1.7 | | | | 6.5 | 7.0 | 5.3 | 8.7 | 90 | 17 | | | | 50 | 210 | 4 |
| 07/21 | 1.8 | | | | 6.6 | 8.4 | 6.8 | 8.5 | 90 | 18 | | | | 52 | 200 | 3 |
| 08/04 | 2.0 | 140 | 8.5 | 13.6 | 6.6 | 8.3 | 6.8 | 7.7 | 83 | 19 | 63 | 35 | 2.00 | 50 | 240 | 3 |
| 08/18 | 2.0 | | | | 6.6 | 9.8 | 8.3 | 8.3 | 89 | 19 | | | | 57 | 250 | 3 |
| 09/02 | 1.7 | | | | 6.6 | 7.1 | 5.4 | 8.5 | 88 | 17 | | | | 50 | | |
| 09/15 | 1.7 | | | | 6.7 | 8.4 | 6.8 | 8.7 | 88 | 16 | | | | 50 | 140 | 1 |
| 09/29 | 1.8 | | | | 6.5 | 7.1 | 5.1 | 9.2 | 84 | 11 | | | | 50 | | |
| 10/02 | | | | | | | | | | | | | | | 300 | |
| 10/14 | 1.0 | | | | 6.4 | 8.0 | 6.4 | 8.8 | 78 | 10 | | | | 50 | 11 | |
| 10/27 | 1.2 | | | | 6.4 | 4.8 | 2.9 | 11.6 | 91 | 5 | | | | 50 | 450 | 17 |
| 11/12 | 0.6 | 70 | 10.4 | 12.3 | 5.9 | 3.0 | 1.5 | 12.0 | 90 | 3 | 53 | 29 | 0.50 | 55 | 240 | 3 |
| 11/24 | 0.5 | | | | 6.1 | 3.6 | 2.1 | 13.4 | 95 | 1 | | | | 57 | 270 | 2 |
| 12/08 | 0.6 | | | | 6.1 | 3.8 | 1.9 | 13.4 | 92 | 0 | | | | 60 | 100 | |
| 12/22 | 0.7 | | | | 6.2 | 5.3 | 3.9 | 13.1 | 90 | 0 | | | | 65 | 43 | |
| AVG. | 1.0 | 72 | 10.7 | 12.0 | 6.3 | 5.2 | 3.5 | 10.9 | 90 | 8 | 53 | 32 | 0.78 | 53 | 138 | |
| MAX. | 2.0 | 140 | 13.4 | 13.6 | 6.7 | 9.8 | 8.3 | 13.4 | 96 | 19 | 63 | 35 | 2.00 | 65 | 450 | 17 |
| MIN. | 0.3 | 32 | 8.5 | 9.3 | 5.9 | 2.3 | 0.7 | 7.7 | 78 | 0 | 47 | 29 | 0.25 | 43 | 11 | |

UABBIN LABORATORY RECORDS 1997
'ARE RIVER AND TRIBUTARIES
09) LONGMEADOW BROOK– @ MOUTH

| ATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/06 | 0.3 | | | | 6.1 | 6.6 | 5.0 | 10.5 | 74 | 1 | | | | 113 | 70 | 5 |
| 1/21 | 0.4 | | | | 6.1 | 8.3 | 6.7 | 9.2 | 63 | 0 | | | | 157 | 55 | 1 |
| 2/03 | 0.4 | | | | 6.1 | 7.4 | 6.0 | 8.9 | 61 | 0 | | | | 150 | 46 | 0 |
| 2/18 | 0.4 | 28 | 35.0 | 20.1 | 6.3 | 7.9 | 6.0 | 9.2 | 63 | 0 | 85 | 68 | 0.18 | 150 | 28 | 0 |
| 3/03 | 0.4 | | | | 6.3 | 6.9 | 5.2 | 9.6 | 72 | 3 | | | | 145 | 50 | 0 |
| 3/17 | 0.4 | | | | 6.2 | 7.2 | 5.4 | 10.5 | 72 | 0 | | | | 150 | 45 | 0 |
| 3/31 | 0.5 | | | | 6.1 | 5.3 | 3.7 | 9.4 | 76 | 6 | | | | 123 | | |
| 4/14 | 0.4 | | | | 6.1 | 6.3 | 4.6 | 8.8 | 71 | 6 | | | | 110 | 50 | 1 |
| 4/28 | 0.9 | | | | 6.2 | 9.1 | 7.2 | 5.9 | 52 | 10 | | | | 130 | 36 | 10 |
| 5/12 | 1.7 | 48 | 27.8 | 14.6 | 6.3 | 9.5 | 7.5 | 6.0 | 53 | 10 | 88 | 67 | 0.67 | 128 | 8 | 1 |
| 5/27 | 2.5 | | | | 6.3 | 10.3 | 8.7 | 5.1 | 47 | 12 | | | | 137 | 13 | 7 |
| 6/09 | 2.2 | | | | 6.3 | 10.9 | 9.3 | 5.6 | 53 | 13 | | | | 148 | 110 | 70 |
| 6/23 | 2.3 | | | | 6.3 | 17.5 | 15.7 | 3.0 | 33 | 20 | | | | 150 | 120 | 60 |
| 7/07 | 2.2 | | | | 6.2 | 15.2 | 13.3 | 2.4 | 26 | 18 | | | | 123 | 200 | 60 |
| 7/21 | 2.8 | | | | 6.2 | 18.1 | 16.4 | 2.0 | 22 | 19 | | | | 130 | 130 | 40 |
| 8/04 | 1.8 | 60 | 34.5 | 20.6 | 6.3 | 18.0 | 16.4 | 2.4 | 27 | 20 | 102 | 75 | 1.18 | 155 | 160 | 70 |
| 8/18 | 1.8 | | | | 6.3 | 19.8 | 18.1 | 2.8 | 31 | 20 | | | | 120 | 300 | 140 |
| 9/02 | 1.7 | | | | 6.1 | 12.6 | 10.6 | 2.9 | 31 | 18 | | | | 132 | 300 | 60 |
| 0/02 | | | | | | | | | | | | | | | 1,300 | 40 |
| 0/14 | 3.7 | | | | 6.2 | 23.0 | 20.8 | 1.4 | 13 | 11 | | | | 135 | 250 | 40 |
| 0/27 | 3.8 | | | | 6.2 | 17.1 | 15.2 | 4.1 | 33 | 6 | | | | 113 | 450 | 70 |
| 1/12 | 0.8 | 55 | 42.9 | 23.1 | 5.9 | 6.3 | 4.6 | 5.8 | 45 | 4 | 108 | 81 | 0.50 | 163 | 200 | 0 |
| 1/24 | 0.5 | | | | 5.7 | 5.0 | 3.3 | 9.1 | 63 | 0 | | | | 163 | 490 | 0 |
| 2/08 | 0.5 | | | | 5.9 | 6.5 | 4.7 | 8.1 | 56 | 0 | | | | 155 | 40 | 1 |
| 2/22 | 0.6 | | | | 6.0 | 9.7 | 8.1 | 7.8 | 54 | 0 | | | | 170 | 100 | 78 |
| VG. | 1.4 | 48 | 35.1 | 19.6 | 6.2 | 11.0 | 9.3 | 6.3 | 50 | 8 | 96 | 73 | 0.63 | 140 | 190 | 31 |
| IAX. | 3.8 | 60 | 42.9 | 23.1 | 6.3 | 23.0 | 20.8 | 10.5 | 76 | 20 | 108 | 81 | 1.18 | 170 | 1,300 | 140 |
| IIN. | 0.3 | 28 | 27.8 | 14.6 | 5.7 | 5.0 | 3.3 | 1.4 | 13 | 0 | 85 | 67 | 0.18 | 110 | 8 | 0 |

QUABBIN LABORATORY RECORDS 1997
WARE RIVER AND TRIBUTARIES
(121) MILL BROOK -- @ CHARNOCK HILL RD.

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/06 | 0.3 | | | | 6.3 | 6.6 | 4.9 | 11.3 | 80 | 1 | | | | 138 | 33 | |
| 01/21 | 0.4 | | | | 6.3 | 8.6 | 7.0 | 11.0 | 76 | 0 | | | | 220 | 44 | |
| 02/03 | 0.4 | | | | 6.3 | 7.5 | 5.8 | 10.9 | 77 | 1 | | | | 220 | 60 | 3 |
| 02/18 | 0.4 | 27 | 57.0 | 25.2 | 6.4 | 8.5 | 6.6 | 10.8 | 74 | 0 | 126 | 102 | 0.20 | 230 | 64 | |
| 03/03 | 0.4 | | | | 6.4 | 7.0 | 5.4 | 10.7 | 80 | 3 | | | | 168 | 60 | |
| 03/17 | 0.4 | | | | 6.4 | 7.7 | 6.2 | 11.0 | 78 | 1 | | | | 188 | 39 | |
| 03/31 | 0.5 | | | | 6.3 | 6.6 | 5.2 | 10.2 | 82 | 6 | | | | 160 | | |
| 04/14 | 0.4 | | | | 6.3 | 6.1 | 4.2 | 9.8 | 79 | 6 | | | | 148 | 50 | |
| 04/28 | 0.6 | | | | 6.4 | 8.1 | 6.2 | 8.9 | 81 | 11 | | | | 157 | 25 | |
| 05/12 | 0.6 | 37 | 34.0 | 15.0 | 6.6 | 8.9 | 6.8 | 9.0 | 82 | 11 | 99 | 76 | 0.32 | 152 | 27 | |
| 05/27 | 1.0 | | | | 6.5 | 10.2 | 8.7 | 7.9 | 78 | 15 | | | | 163 | 55 | 2 |
| 06/09 | 0.9 | | | | 6.5 | 9.4 | 7.9 | 7.7 | 80 | 17 | | | | 180 | 150 | 7 |
| 06/23 | 1.3 | | | | 6.8 | 21.6 | 19.5 | 5.7 | 66 | 23 | | | | 183 | 150 | 5 |
| 07/07 | 1.3 | | | | 6.5 | 10.5 | 8.8 | 6.8 | 76 | 21 | | | | 173 | 100 | 7 |
| 07/21 | 2.0 | | | | 6.7 | 19.5 | 17.7 | 5.9 | 66 | 21 | | | | 173 | 150 | 1 |
| 08/04 | 2.0 | 47 | 41.2 | 39.3 | 6.8 | 33.2 | 31.3 | 5.8 | 62 | 19 | 132 | 99 | 0.72 | 210 | 90 | |
| 08/18 | 1.8 | | | | 6.7 | 24.1 | 22.5 | 6.2 | 68 | 20 | | | | 190 | 400 | 10 |
| 09/02 | 1.5 | | | | 6.8 | 19.7 | 17.8 | 6.4 | 70 | 20 | | | | 163 | 200 | 4 |
| 09/15 | 1.0 | | | | 6.7 | 18.2 | 16.5 | 6.5 | 69 | 18 | | | | 190 | 120 | |
| 09/29 | 2.0 | | | | 6.8 | 23.5 | 21.9 | 7.0 | 68 | 14 | | | | 197 | | |
| 10/02 | | | | | | | | | | | | | | | 300 | |
| 10/14 | 1.5 | | | | 6.8 | 31.2 | 29.3 | 6.1 | 57 | 12 | | | | 200 | 120 | |
| 10/27 | 1.5 | | | | 6.7 | 18.8 | 16.9 | 8.6 | 71 | 7 | | | | 180 | 400 | |
| 11/12 | 0.6 | 48 | 48.9 | 14.2 | 6.4 | 9.4 | 7.8 | 9.7 | 76 | 5 | 126 | 93 | 0.40 | 200 | 300 | |
| 11/24 | 0.5 | | | | 6.3 | 7.5 | 6.0 | 11.0 | 80 | 2 | | | | 173 | 340 | |
| 12/08 | 0.5 | | | | 6.4 | 9.4 | 7.5 | 10.5 | 76 | 2 | | | | 170 | 50 | |
| 12/22 | 1.0 | | | | 6.3 | 13.1 | 11.4 | 9.4 | 68 | 2 | | | | 197 | 40 | |
| AVG. | 1.0 | 40 | 45.3 | 23.4 | 6.5 | 13.7 | 11.9 | 8.6 | 74 | 10 | 121 | 93 | 0.41 | 182 | 135 | |
| MAX. | 2.0 | 48 | 57.0 | 39.3 | 6.8 | 33.2 | 31.3 | 11.3 | 82 | 23 | 132 | 102 | 0.72 | 230 | 400 | 1 |
| MIN. | 0.3 | 27 | 34.0 | 14.2 | 6.3 | 6.1 | 4.2 | 5.7 | 57 | 0 | 99 | 76 | 0.20 | 138 | 25 | |

UABBIN LABORATORY RECORDS 1997
ARE RIVER AND TRIBUTARIES
OULTON POND -- BELOW DAM

| ATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| /06 | 0.5 | | | | 6.3 | 5.4 | 3.4 | 11.9 | 86 | 2 | | | | 103 | 32 | 1 |
| /21 | 0.7 | | | | 6.2 | 7.4 | 5.8 | 11.4 | 83 | 2 | | | | 132 | 37 | 0 |
| /03 | 0.7 | | | | 6.2 | 6.9 | 5.2 | 10.8 | 81 | 3 | | | | 158 | 13 | 0 |
| /18 | 0.5 | 35 | 35.2 | 21.6 | 6.2 | 6.4 | 4.5 | 10.7 | 80 | 3 | 92 | 73 | 0.15 | 160 | 17 | 0 |
| /03 | 0.8 | | | | 6.2 | 6.8 | 4.8 | 10.3 | 81 | 5 | | | | 175 | 9 | 0 |
| /17 | 0.6 | | | | 6.3 | 7.0 | 5.2 | 10.9 | 84 | 4 | | | | 167 | 5 | 0 |
| /31 | 1.5 | | | | 6.3 | 6.0 | 4.3 | 10.9 | 88 | 6 | | | | 127 | | |
| /14 | 0.8 | | | | 6.4 | 5.6 | 3.7 | 10.6 | 90 | 8 | | | | 105 | 22 | 0 |
| /28 | 0.7 | | | | 6.5 | 6.3 | 4.8 | 9.9 | 90 | 11 | | | | 93 | 37 | 0 |
| /12 | 0.7 | 47 | 21.0 | 17.8 | 6.6 | 7.2 | 5.2 | 9.3 | 86 | 12 | 72 | 52 | 0.30 | 98 | 25 | 0 |
| /27 | 1.3 | | | | 6.6 | 7.9 | 6.4 | 8.6 | 87 | 16 | | | | 100 | 40 | 0 |
| /09 | 1.2 | | | | 6.6 | 8.8 | 7.2 | 7.7 | 83 | 19 | | | | 102 | 9 | 1 |
| /23 | 1.5 | | | | 6.6 | 9.6 | 7.9 | 7.1 | 85 | 25 | | | | 105 | 30 | 10 |
| /07 | 1.5 | | | | 6.7 | 10.4 | 8.9 | 7.3 | 86 | 24 | | | | 107 | 70 | 40 |
| /21 | 2.2 | | | | 6.6 | 12.3 | 10.3 | 5.8 | 68 | 24 | | | | 110 | 80 | 30 |
| /04 | 1.8 | 60 | 31.5 | 20.7 | 6.4 | 18.1 | 16.2 | 2.2 | 25 | 21 | 109 | 81 | 1.30 | 160 | 60 | 0 |
| /18 | 1.5 | | | | 6.4 | 12.7 | 11.1 | 4.6 | 53 | 23 | | | | 125 | 30 | 10 |
| /02 | 1.5 | | | | 6.7 | 10.4 | 8.9 | 7.6 | 85 | 21 | | | | 107 | 200 | 0 |
| /15 | 1.2 | | | | 6.4 | 14.0 | 12.1 | 4.2 | 46 | 20 | | | | 138 | 350 | 30 |
| /29 | 2.7 | | | | 6.3 | 17.2 | 15.4 | 4.1 | 41 | 15 | | | | 168 | | |
| /02 | | | | | | | | | | | | | | | 0 | 3 |
| /27 | 2.7 | | | | 6.5 | 11.8 | 9.7 | 8.7 | 74 | 8 | | | | 138 | 210 | 0 |
| /12 | 0.9 | | 23.6 | 18.3 | 6.5 | 9.3 | 7.8 | 11.2 | 90 | 6 | 74 | 47 | 0.22 | 112 | 240 | 0 |
| /24 | 0.8 | | | | 6.6 | 9.2 | 7.6 | 11.4 | 85 | 3 | | | | 110 | 100 | 0 |
| /08 | 0.8 | | | | 6.3 | 10.0 | 8.2 | 10.0 | 77 | 4 | | | | 122 | 65 | 0 |
| /22 | 1.0 | | | | 6.3 | 10.6 | 9.0 | 10.2 | 79 | 4 | | | | 130 | 60 | 0 |
| VG. | 1.2 | 47 | 27.8 | 19.6 | 6.4 | 9.5 | 7.7 | 8.7 | 77 | 12 | 87 | 63 | 0.49 | 126 | 73 | 5 |
| AX. | 2.7 | 60 | 35.2 | 21.6 | 6.7 | 18.1 | 16.2 | 11.9 | 90 | 25 | 109 | 81 | 1.30 | 175 | 350 | 40 |
| IN. | 0.5 | 35 | 21.0 | 17.8 | 6.2 | 5.4 | 3.4 | 2.2 | 25 | 2 | 72 | 47 | 0.15 | 93 | 0 | 0 |

QUABBIN LABORATORY RECORDS 1997
WARE RIVER AND TRIBUTARIES
(110) LONG + WHITEHALL PONDS -- @ OUTLET

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/06 | 0.4 | | | | 6.4 | 6.7 | 4.8 | 11.4 | 83 | 2 | | | | 130 | 33 | |
| 01/21 | 0.4 | | | | 6.2 | 8.0 | 6.5 | 11.2 | 79 | 1 | | | | 150 | 49 | |
| 02/03 | 0.5 | | | | 6.2 | 7.2 | 5.6 | 11.8 | 83 | 1 | | | | 147 | 15 | |
| 02/18 | 0.4 | 23 | 39.5 | 16.7 | 6.4 | 8.0 | 6.1 | 11.6 | 87 | 3 | 91 | 69 | 0.12 | 163 | 35 | |
| 03/03 | 0.5 | | | | 6.4 | 6.8 | 5.0 | 11.9 | 93 | 5 | | | | 160 | 27 | |
| 03/17 | 0.4 | | | | 6.4 | 6.6 | 4.8 | 11.6 | 89 | 4 | | | | 150 | 13 | |
| 03/31 | 0.5 | | | | 6.4 | 6.0 | 4.3 | 11.9 | 96 | 6 | | | | 152 | | |
| 04/14 | 0.4 | | | | 6.5 | 6.4 | 4.9 | 11.1 | 94 | 8 | | | | 142 | 19 | |
| 04/28 | 0.4 | | | | 6.6 | 6.8 | 5.3 | 10.2 | 93 | 11 | | | | 133 | 40 | |
| 05/12 | 0.5 | 23 | 38.4 | 19.1 | 6.6 | 6.4 | 4.7 | 9.8 | 93 | 13 | 90 | 72 | 0.13 | 152 | 18 | |
| 05/27 | 0.5 | | | | 6.7 | 7.4 | 6.0 | 9.2 | 93 | 16 | | | | 158 | 15 | |
| 06/09 | 0.5 | | | | 6.8 | 8.2 | 6.7 | 8.8 | 95 | 19 | | | | 160 | 7 | |
| 06/23 | 0.7 | | | | 6.8 | 8.9 | 7.3 | 7.8 | 93 | 25 | | | | 160 | 12 | |
| 07/07 | 0.7 | | | | 6.8 | 9.1 | 7.5 | 7.6 | 89 | 24 | | | | 160 | 11 | |
| 07/21 | 0.7 | | | | 7.0 | 9.8 | 8.1 | 7.5 | 90 | 25 | | | | 150 | 6 | |
| 08/04 | 0.8 | 25 | 41.7 | 19.1 | 6.8 | 10.6 | 9.2 | 7.5 | 88 | 24 | 99 | 78 | 0.35 | 170 | 60 | |
| 08/18 | 0.7 | | | | 6.9 | 10.5 | 9.0 | 7.9 | 93 | 24 | | | | 168 | 17 | |
| 09/02 | 0.8 | | | | 7.0 | 10.8 | 9.3 | 7.9 | 90 | 22 | | | | 170 | 5 | |
| 09/15 | 0.9 | | | | 6.8 | 11.7 | 10.2 | 7.6 | 85 | 21 | | | | 180 | 20 | |
| 09/29 | 0.7 | | | | 6.8 | 11.3 | 9.6 | 8.0 | 81 | 16 | | | | 183 | | |
| 10/14 | 0.5 | | | | 6.8 | 10.8 | 9.3 | 8.6 | 85 | 15 | | | | 183 | 7 | |
| 10/27 | 0.6 | | | | 6.9 | 10.6 | 8.8 | 8.9 | 77 | 9 | | | | 182 | 67 | |
| 11/12 | 0.5 | 15 | 44.2 | 19.3 | 6.7 | 9.7 | 8.3 | 10.2 | 84 | 7 | 101 | 79 | 0.15 | 180 | 62 | |
| 11/24 | 0.5 | | | | 6.7 | 9.3 | 7.6 | 10.7 | 82 | 4 | | | | 190 | 130 | |
| 12/08 | 0.5 | | | | 6.5 | 9.6 | 8.1 | 10.3 | 77 | 3 | | | | 180 | 70 | |
| 12/22 | 0.6 | | | | 6.4 | 10.1 | 8.6 | 10.1 | 76 | 3 | | | | 182 | 65 | |
| AVG. | 0.6 | 22 | 41.0 | 18.6 | 6.6 | 8.7 | 7.1 | 9.7 | 87 | 12 | 95 | 75 | 0.19 | 163 | 33 | |
| MAX. | 0.9 | 25 | 44.2 | 19.3 | 7.0 | 11.7 | 10.2 | 11.9 | 96 | 25 | 101 | 79 | 0.35 | 190 | 130 | |
| MIN. | 0.4 | 15 | 38.4 | 16.7 | 6.2 | 6.0 | 4.3 | 7.5 | 76 | 1 | 90 | 69 | 0.12 | 130 | 5 | |

UABBIN LABORATORY RECORDS 1997
ARE RIVER AND TRIBUTARIES
19) DEMON POND -- @ OUTLET

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/06 | 0.4 | | | | 6.7 | 8.3 | 6.4 | 12.7 | 90 | 1 | | | | 73 | 16 | 7 |
| 1/21 | 0.5 | | | | 6.7 | 9.5 | 8.0 | 12.4 | 88 | 1 | | | | 78 | 38 | 1 |
| 2/03 | 0.5 | | | | 6.6 | 8.8 | 7.2 | 12.2 | 89 | 2 | | | | 78 | 25 | 0 |
| 2/18 | 0.4 | 30 | 15.2 | 17.2 | 6.6 | 9.4 | 7.6 | 12.8 | 96 | 3 | 50 | 31 | 0.08 | 80 | 33 | 0 |
| 3/03 | 0.4 | | | | 6.7 | 8.5 | 6.8 | 13.2 | 99 | 3 | | | | 73 | 17 | 1 |
| 3/17 | 0.4 | | | | 6.8 | 9.0 | 7.2 | 13.0 | 97 | 3 | | | | 83 | 9 | 0 |
| 3/31 | 0.5 | | | | 6.7 | 8.2 | 6.4 | 11.8 | 95 | 6 | | | | 83 | | |
| 4/14 | 0.5 | | | | 6.7 | 8.3 | 6.7 | 11.2 | 90 | 6 | | | | 80 | 8 | 3 |
| 4/28 | 0.7 | | | | 6.7 | 8.4 | 6.9 | 9.8 | 89 | 11 | | | | 78 | 15 | 11 |
| 5/12 | 0.6 | 27 | 16.5 | 18.3 | 6.7 | 8.2 | 6.4 | 9.7 | 90 | 12 | 55 | 38 | 0.06 | 78 | 100 | 0 |
| 5/27 | 0.8 | | | | 6.7 | 8.7 | 7.3 | 8.8 | 85 | 14 | | | | 78 | 4 | 2 |
| 6/09 | 0.9 | | | | 6.8 | 9.8 | 8.4 | 8.1 | 85 | 18 | | | | 80 | 3 | 1 |
| 6/23 | 0.8 | | | | 6.7 | 10.4 | 8.9 | 6.6 | 78 | 24 | | | | 80 | 30 | 0 |
| 7/07 | 0.6 | | | | 6.8 | 10.6 | 8.8 | 6.9 | 80 | 23 | | | | 80 | 10 | 0 |
| 7/21 | 0.5 | | | | 6.8 | 11.0 | 9.5 | 6.5 | 76 | 24 | | | | 78 | 50 | 20 |
| 8/18 | 0.5 | | | | 6.7 | 10.6 | 9.1 | 6.7 | 79 | 24 | | | | 80 | 50 | 10 |
| 9/02 | 0.4 | | | | 6.8 | 10.9 | 9.1 | 7.0 | 80 | 22 | | | | 80 | 130 | 20 |
| 9/15 | 0.4 | | | | 6.7 | 11.6 | 9.8 | 6.8 | 75 | 20 | | | | 80 | 60 | 0 |
| 0/27 | 0.6 | | | | 6.8 | 10.7 | 9.1 | 9.1 | 77 | 8 | | | | 80 | 150 | 0 |
| 1/12 | 0.5 | 22 | 14.6 | 14.7 | 6.7 | 10.6 | 9.0 | 10.0 | 81 | 6 | 50 | 33 | 0.08 | 80 | 110 | 0 |
| 1/24 | 0.5 | | | | 6.7 | 10.5 | 9.1 | 10.7 | 80 | 3 | | | | 80 | 70 | 20 |
| 2/08 | 0.4 | | | | 6.7 | 10.6 | 9.0 | 11.8 | 83 | 1 | | | | 80 | 10 | 0 |
| 2/22 | 0.6 | | | | 6.7 | 11.4 | 9.8 | 12.2 | 91 | 3 | | | | 87 | 19 | 0 |
| VG. | 0.5 | 26 | 15.4 | 16.7 | 6.7 | 9.7 | 8.1 | 10.0 | 86 | 10 | 52 | 34 | 0.07 | 79 | 44 | 4 |
| AX. | 0.9 | 30 | 16.5 | 18.3 | 6.8 | 11.6 | 9.8 | 13.2 | 99 | 24 | 55 | 38 | 0.08 | 87 | 150 | 20 |
| IN. | 0.4 | 22 | 14.6 | 14.7 | 6.6 | 8.2 | 6.4 | 6.5 | 75 | 1 | 50 | 31 | 0.06 | 73 | 3 | 0 |

QUABBIN LABORATORY RECORDS 1997
WARE RIVER AND TRIBUTARIES
(102) PARKER BROOK -- NEAR MOUTH

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/06 | 0.4 | | | | 6.1 | 3.8 | 2.3 | 12.4 | 93 | 3 | | | | 80 | 29 | |
| 01/21 | 0.5 | | | | 6.3 | 5.2 | 3.6 | 12.2 | 86 | 1 | | | | 105 | 35 | |
| 02/03 | 0.5 | | | | 6.2 | 4.8 | 3.4 | 12.1 | 88 | 2 | | | | 102 | 41 | |
| 02/18 | 0.5 | 27 | 22.0 | 13.5 | 6.4 | 4.9 | 3.1 | 12.3 | 89 | 2 | 67 | 51 | 0.25 | 107 | 60 | |
| 03/03 | 0.5 | | | | 6.4 | 4.4 | 2.8 | 12.4 | 93 | 3 | | | | 83 | 40 | |
| 03/17 | 0.5 | | | | 6.4 | 4.3 | 2.5 | 12.8 | 90 | 1 | | | | 97 | 45 | |
| 03/31 | 0.6 | | | | 6.1 | 3.4 | 2.0 | 11.8 | 93 | 5 | | | | 82 | | |
| 04/14 | 0.5 | | | | 6.1 | 3.6 | 1.9 | 11.7 | 92 | 5 | | | | 80 | 50 | |
| 04/28 | 0.7 | | | | 6.2 | 3.9 | 2.2 | 10.8 | 92 | 8 | | | | 92 | 45 | |
| 05/12 | 0.6 | 47 | 24.0 | 13.6 | 6.4 | 4.8 | 3.3 | 10.8 | 94 | 9 | 73 | 54 | 0.37 | 100 | 31 | |
| 05/27 | 0.7 | | | | 6.4 | 5.4 | 3.9 | 10.5 | 93 | 10 | | | | 102 | 50 | |
| 06/09 | 0.8 | | | | 6.5 | 6.8 | 5.4 | 10.3 | 94 | 11 | | | | 108 | 40 | |
| 06/23 | 1.3 | | | | 6.6 | 7.3 | 5.7 | 9.1 | 92 | 16 | | | | 112 | 240 | |
| 07/07 | 1.3 | | | | 6.5 | 5.9 | 4.2 | 9.4 | 93 | 15 | | | | 115 | 150 | |
| 07/21 | 1.7 | | | | 6.7 | 8.1 | 6.7 | 9.3 | 90 | 14 | | | | 108 | 70 | |
| 08/04 | 1.5 | 45 | 22.5 | 12.7 | 6.6 | 7.8 | 6.4 | 9.3 | 92 | 15 | 76 | 60 | 0.70 | 108 | 250 | 1 |
| 08/18 | 1.8 | | | | 6.6 | 7.7 | 6.1 | 9.6 | 95 | 15 | | | | 100 | 220 | 1 |
| 09/02 | 1.5 | | | | 6.7 | 8.3 | 6.5 | 9.5 | 92 | 14 | | | | 105 | 190 | |
| 09/15 | 1.3 | | | | 6.7 | 8.9 | 7.0 | 9.6 | 91 | 13 | | | | 103 | 150 | |
| 10/02 | | | | | | | | | | | | | | | 900 | |
| 10/14 | 0.6 | | | | 6.7 | 8.6 | 7.2 | 10.0 | 89 | 10 | | | | 103 | 240 | |
| 10/27 | 1.5 | | | | 6.5 | 7.2 | 5.7 | 10.6 | 86 | 6 | | | | 90 | 600 | |
| 11/12 | 0.7 | 48 | 24.1 | 14.3 | 6.4 | 5.6 | 4.0 | 12.4 | 93 | 3 | 71 | 51 | 0.43 | 98 | 390 | |
| 11/24 | 0.6 | | | | 6.4 | 5.1 | 3.6 | 12.0 | 90 | 3 | | | | 95 | 290 | |
| 12/08 | 0.6 | | | | 6.4 | 6.6 | 5.0 | 12.1 | 88 | 2 | | | | 98 | 80 | |
| 12/22 | 0.7 | | | | 6.4 | 7.8 | 6.4 | 12.8 | 88 | 0 | | | | 105 | 120 | |
| AVG. | 0.9 | 42 | 23.2 | 13.5 | 6.4 | 6.0 | 4.4 | 11.0 | 91 | 7 | 72 | 54 | 0.44 | 99 | 174 | |
| MAX. | 1.8 | 48 | 24.1 | 14.3 | 6.7 | 8.9 | 7.2 | 12.8 | 95 | 16 | 76 | 60 | 0.70 | 115 | 900 | 1 |
| MIN. | 0.4 | 27 | 22.0 | 12.7 | 6.1 | 3.4 | 1.9 | 9.1 | 86 | 0 | 67 | 51 | 0.25 | 80 | 29 | |

)UABBIN LABORATORY RECORDS 1997
/ARE RIVER AND TRIBUTARIES
N1) NATTY POND BROOK -- @ HALE RD.

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/06 | 0.4 | | | | 5.6 | 2.9 | 1.0 | 9.8 | 67 | 0 | | | | 57 | 45 | 1 |
| 1/21 | 0.5 | | | | 5.6 | 4.7 | 2.9 | 8.0 | 55 | 0 | | | | 75 | 60 | 0 |
| 2/03 | 0.6 | | | | 5.8 | 5.4 | 3.8 | 9.2 | 63 | 0 | | | | 72 | 55 | 0 |
| 2/18 | 0.6 | 50 | 15.9 | 14.8 | 5.9 | 5.5 | 3.7 | 8.7 | 60 | 0 | 54 | 37 | 0.45 | 72 | 40 | 0 |
| 3/03 | 0.5 | | | | 5.9 | 4.1 | 2.3 | 9.7 | 69 | 1 | | | | 55 | 50 | 0 |
| 3/17 | 0.5 | | | | 5.8 | 4.9 | 3.4 | 9.3 | 64 | 0 | | | | 65 | 55 | 0 |
| 3/31 | 0.5 | | | | 5.7 | 3.6 | 1.9 | 8.9 | 70 | 5 | | | | 52 | | |
| 4/14 | 0.4 | | | | 5.7 | 3.2 | 1.3 | 9.0 | 73 | 6 | | | | 50 | 100 | 2 |
| 4/28 | 0.5 | | | | 5.7 | 4.1 | 2.6 | 6.7 | 58 | 9 | | | | 52 | 60 | 3 |
| 5/12 | 0.5 | 75 | 13.6 | 13.6 | 5.9 | 4.5 | 2.7 | 7.1 | 65 | 11 | 47 | 26 | 0.43 | 52 | 100 | 1 |
| 5/27 | 0.7 | | | | 5.8 | 5.0 | 3.2 | 5.2 | 49 | 13 | | | | 53 | 60 | 2 |
| 6/09 | 1.8 | | | | 6.0 | 9.6 | 7.8 | 4.3 | 42 | 14 | | | | 60 | 60 | 7 |
| 6/23 | 2.7 | | | | 6.2 | 13.7 | 11.7 | 2.3 | 25 | 20 | | | | 68 | 30 | 10 |
| 7/07 | 2.0 | | | | 6.0 | 11.1 | 9.2 | 3.0 | 32 | 18 | | | | 60 | 80 | 30 |
| 7/21 | 2.0 | | | | 6.1 | 11.7 | 9.6 | 2.6 | 28 | 19 | | | | 60 | 50 | 20 |
| 8/04 | 1.7 | 200 | 9.6 | 15.1 | 6.1 | 10.5 | 9.1 | 3.8 | 42 | 20 | 79 | 40 | 2.40 | 58 | 40 | 0 |
| 8/18 | 3.0 | | | | 5.9 | 12.3 | 10.6 | 2.2 | 24 | 20 | | | | 63 | 110 | 30 |
| 9/02 | 1.7 | | | | 6.0 | 10.6 | 8.7 | 3.4 | 36 | 18 | | | | 58 | 80 | 0 |
| 9/15 | 1.5 | | | | 6.1 | 10.8 | 8.8 | 3.7 | 39 | 17 | | | | 58 | 110 | 0 |
| 9/29 | 1.3 | | | | 6.2 | 8.2 | 6.4 | 6.7 | 62 | 12 | | | | 53 | | |
| 0/02 | | | | | | | | | | | | | | | 0 | 0 |
| 0/14 | 1.0 | | | | 6.0 | 8.3 | 6.8 | 5.4 | 49 | 11 | | | | 57 | 110 | 60 |
| 0/27 | 1.0 | | | | 5.9 | 5.9 | 4.0 | 8.4 | 66 | 5 | | | | 58 | 460 | 0 |
| 1/12 | 0.6 | 90 | 14.0 | 18.1 | 5.6 | 3.3 | 1.8 | 8.3 | 62 | 3 | 59 | 30 | 0.65 | 58 | 400 | 0 |
| 1/24 | 0.7 | | | | 5.7 | 4.5 | 3.2 | 9.7 | 71 | 2 | | | | 62 | 470 | 0 |
| 2/08 | 0.8 | | | | 5.7 | 4.9 | 3.0 | 9.0 | 62 | 0 | | | | 67 | 130 | 0 |
| 2/22 | 1.2 | | | | 5.7 | 7.4 | 5.8 | 7.3 | 50 | 0 | | | | 77 | 120 | 1 |
| VG. | 1.1 | 104 | 13.3 | 15.4 | 5.9 | 7.0 | 5.2 | 6.6 | 53 | 9 | 60 | 33 | 0.98 | 60 | 115 | 7 |
| AX. | 3.0 | 200 | 15.9 | 18.1 | 6.2 | 13.7 | 11.7 | 9.8 | 73 | 20 | 79 | 40 | 2.40 | 77 | 470 | 60 |
| IN. | 0.4 | 50 | 9.6 | 13.6 | 5.6 | 2.9 | 1.0 | 2.2 | 24 | 0 | 47 | 26 | 0.43 | 50 | 0 | 0 |

# 8.0 OTHER - MDC DRINKING WATER

QUABBIN LABORATORY RECORDS 1997
M.D.C. DRINKING WATER
IANGER BATH TAP

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| )9/03 | | | | | | | | | | | | | | | 0 | 0 |

VISITOR CENTER FOUNTAIN

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| )1/08 | | | | | | | | | | | | | | | 0 | 0 |
| )2/12 | 0.9 | 5 | 4.9 | 37.5 | 8.0 | 30.4 | | | | | | | 0.13 | 110 | 0 | 0 |
| )3/11 | | | | | | | | | | | | | | | 0 | 0 |
| )4/10 | | | | | | | | | | | | | | | 0 | 0 |
| )5/13 | 0.6 | 5 | 5.0 | 37.7 | 8.0 | 29.8 | | | | | | | 0.12 | 105 | 0 | 0 |
| )6/18 | | | | | | | | | | | | | | | 0 | 0 |
| )7/08 | | | | | | | | | | | | | | | 0 | 0 |
| )8/21 | 1.5 | 5 | 3.8 | 33.6 | 7.9 | 28.5 | | | | | | | 0.25 | 102 | 0 | 0 |
| )9/16 | | | | | | | | | | | | | | | 0 | 0 |
| 10/16 | | | | | | | | | | | | | | | 0 | 0 |
| 11/13 | 2.0 | 5 | 5.6 | 34.4 | 7.8 | 27.4 | | | | | | | 0.28 | 105 | 0 | 0 |
| 12/02 | | | | | | | | | | | | | | | 0 | 0 |
| AVG. | 1.3 | 5 | 4.8 | 35.8 | 7.9 | 29.0 | | | | | | | 0.20 | 106 | 0 | 0 |
| MAX. | 2.0 | 5 | 5.6 | 37.7 | 8.0 | 30.4 | | | | | | | 0.28 | 110 | 0 | 0 |
| MIN. | 0.6 | 5 | 3.8 | 33.6 | 7.8 | 27.4 | | | | | | | 0.12 | 102 | 0 | 0 |

MAIN OFFICE FOUNTAIN

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/08 | | | | | | | | | | | | | | | 0 | 0 |
| 02/12 | 0.7 | 5 | 5.0 | 38.0 | 8.0 | 30.6 | | | | | | | 0.10 | 110 | 0 | 0 |
| 03/11 | | | | | | | | | | | | | | | 0 | 0 |
| 04/10 | | | | | | | | | | | | | | | 0 | 0 |
| 05/13 | 0.7 | 5 | 5.1 | 37.6 | 8.0 | 29.7 | | | | | | | 0.12 | 105 | 0 | 0 |
| 06/18 | | | | | | | | | | | | | | | 0 | 0 |
| 07/08 | | | | | | | | | | | | | | | 0 | 0 |
| 08/21 | 1.5 | 5 | 4.0 | 35.0 | 7.9 | 28.7 | | | | | | | 0.23 | 102 | 0 | 0 |
| 09/16 | | | | | | | | | | | | | | | 0 | 0 |
| 10/16 | | | | | | | | | | | | | | | 0 | 0 |
| 11/13 | 2.0 | 5 | 5.6 | 34.9 | 7.8 | 27.6 | | | | | | | 0.28 | 107 | 0 | 0 |
| 12/02 | | | | | | | | | | | | | | | 0 | 0 |
| AVG. | 1.2 | 5 | 4.9 | 36.4 | 7.9 | 29.2 | | | | | | | 0.18 | 106 | 0 | 0 |
| MAX. | 2.0 | 5 | 5.6 | 38.0 | 8.0 | 30.6 | | | | | | | 0.28 | 110 | 0 | 0 |
| MIN. | 0.7 | 5 | 4.0 | 34.9 | 7.8 | 27.6 | | | | | | | 0.10 | 102 | 0 | 0 |

QUABBIN LABORATORY RECORDS 1997
M.D.C. DRINKING WATER

BLACKSMITH SHOP FOUNTAIN

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/08 | | | | | | | | | | | | | | | 0 | |
| 02/12 | 0.9 | 5 | 13.0 | 32.0 | 6.8 | 45.9 | | | | | | | 0.17 | 193 | 0 | |
| 03/11 | | | | | | | | | | | | | | | 0 | |
| 04/10 | | | | | | | | | | | | | | | 0 | |
| 05/13 | 0.9 | 5 | 11.5 | 38.0 | 6.8 | 48.2 | | | | | | | 0.18 | 190 | 0 | |
| 07/08 | | | | | | | | | | | | | | | 0 | |
| 08/21 | 1.0 | 5 | 9.8 | 37.7 | 6.8 | 48.3 | | | | | | | 0.23 | 188 | 0 | |
| 09/16 | | | | | | | | | | | | | | | 0 | |
| 10/16 | | | | | | | | | | | | | | | 0 | |
| 11/13 | 0.8 | 5 | 10.4 | 49.4 | 6.7 | 47.3 | | | | | | | 0.12 | 190 | 0 | |
| 12/02 | | | | | | | | | | | | | | | 0 | |
| AVG. | 0.9 | 5 | 11.2 | 39.3 | 6.8 | 47.4 | | | | | | | 0.18 | 190 | 0 | |
| MAX. | 1.0 | 5 | 13.0 | 49.4 | 6.8 | 48.3 | | | | | | | 0.23 | 193 | 0 | |
| MIN. | 0.8 | 5 | 9.8 | 32.0 | 6.7 | 45.9 | | | | | | | 0.12 | 188 | 0 | |

RANGER STATION

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/08 | | | | | | | | | | | | | | | 0 | |
| 02/12 | 0.3 | 5 | 6.0 | 30.0 | 6.5 | 24.0 | | | | | | | 0.17 | 110 | 0 | |
| 03/11 | | | | | | | | | | | | | | | 0 | |
| 04/10 | | | | | | | | | | | | | | | 0 | |
| 05/13 | 0.3 | 5 | 5.8 | 29.7 | 6.5 | 25.1 | | | | | | | 0.18 | 107 | 0 | |
| 06/18 | | | | | | | | | | | | | | | 0 | |
| 07/08 | | | | | | | | | | | | | | | 0 | |
| 08/21 | 1.0 | 5 | 5.6 | 33.2 | 6.4 | 29.0 | | | | | | | 0.22 | 112 | 0 | |
| 09/16 | | | | | | | | | | | | | | | 0 | |
| 10/16 | | | | | | | | | | | | | | | 0 | |
| 11/13 | 0.8 | 5 | 8.3 | 12.7 | 6.4 | 33.8 | | | | | | | 0.12 | 138 | 0 | |
| 12/02 | | | | | | | | | | | | | | | 0 | |
| AVG. | 0.6 | 5 | 6.4 | 26.4 | 6.5 | 28.0 | | | | | | | 0.17 | 117 | 0 | |
| MAX. | 1.0 | 5 | 8.3 | 33.2 | 6.5 | 33.8 | | | | | | | 0.22 | 138 | 0 | |
| MIN. | 0.3 | 5 | 5.6 | 12.7 | 6.4 | 24.0 | | | | | | | 0.12 | 107 | 0 | |

UABBIN LABORATORY RECORDS 1997
I.D.C. DRINKING WATER

DRESTRY BUILDING

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/08 | | | | | | | | | | | | | | | 0 | 0 |
| 2/12 | 0.2 | 5 | 10.0 | 36.0 | 6.9 | 30.3 | | | | | | | 0.04 | 120 | 0 | 0 |
| 3/11 | | | | | | | | | | | | | | | 0 | 0 |
| 4/10 | | | | | | | | | | | | | | | 0 | 0 |
| 5/13 | 0.2 | 5 | 11.5 | 39.5 | 6.9 | 30.2 | | | | | | | 0.03 | 120 | 0 | 0 |
| 6/18 | | | | | | | | | | | | | | | 0 | 0 |
| 7/08 | | | | | | | | | | | | | | | 0 | 0 |
| 8/21 | 0.1 | 5 | 14.0 | 43.2 | 6.8 | 31.2 | | | | | | | 0.03 | 140 | 20 | 0 |
| 8/25 | | | | | | | | | | | | | | | 15 | 0 |
| 9/03 | | | | | | | | | | | | | | | 0 | 0 |
| 9/04 | | | | | | | | | | | | | | | | 0 |
| 9/04 | | | | | | | | | | | | | | | | 0 |
| 9/04 | | | | | | | | | | | | | | | | 0 |
| 9/16 | | | | | | | | | | | | | | | 0 | 0 |
| 0/16 | | | | | | | | | | | | | | | 0 | 0 |
| 1/03 | 0.2 | 5 | 18.5 | 50.5 | 6.6 | 30.7 | | | | | | | 0.05 | 155 | 0 | 0 |
| 2/02 | | | | | | | | | | | | | | | 0 | 0 |
| VG. | 0.2 | 5 | 13.5 | 42.3 | 6.8 | 30.6 | | | | | | | 0.04 | 134 | 3 | 0 |
| AX. | 0.2 | 5 | 18.5 | 50.5 | 6.9 | 31.2 | | | | | | | 0.05 | 155 | 20 | 0 |
| MIN. | 0.1 | 5 | 10.0 | 36.0 | 6.6 | 30.2 | | | | | | | 0.03 | 120 | 0 | 0 |

EMETERY TAP

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/08 | | | | | | | | | | | | | | | 0 | 0 |
| 2/12 | 0.9 | 5 | 13.3 | 32.2 | 6.7 | 23.8 | | | | | | | 0.12 | 103 | 0 | 0 |
| 6/18 | | | | | | | | | | | | | | | 0 | 0 |
| 7/08 | | | | | | | | | | | | | | | 0 | 0 |
| 8/21 | 1.8 | 5 | 8.5 | 30.5 | 6.7 | 25.3 | | | | | | | 0.27 | 93 | 0 | 0 |
| 9/16 | | | | | | | | | | | | | | | 0 | 0 |
| 0/16 | | | | | | | | | | | | | | | 0 | 0 |
| 1/13 | 1.3 | 5 | 11.6 | 23.6 | 6.6 | 24.6 | | | | | | | 0.17 | 97 | 0 | 0 |
| 2/02 | | | | | | | | | | | | | | | 0 | 0 |
| AVG. | 1.3 | 5 | 11.1 | 28.8 | 6.7 | 24.6 | | | | | | | 0.19 | 98 | 0 | 0 |
| MAX. | 1.8 | 5 | 13.3 | 32.2 | 6.7 | 25.3 | | | | | | | 0.27 | 103 | 0 | 0 |
| MIN. | 0.9 | 5 | 8.5 | 23.6 | 6.6 | 23.8 | | | | | | | 0.12 | 93 | 0 | 0 |

QUABBIN LABORATORY RECORDS 1997
M.D.C. DRINKING WATER

QUABBIN HILL AT MENS ROOM TAP

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 05/13 | 10.0 | 15 | 17.0 | 32.1 | 6.0 | 9.9 | | | | | | | 1.10 | 122 | 0 | |

WARE RIVER OFFICE TAP

| DATE | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 02/18 | 1.2 | 5 | 69.0 | 140.0 | 7.6 | 42.0 | | | | | | | 0.17 | 400 | 0 | |
| 04/14 | | | | | | | | | | | | | | | 0 | |
| 05/12 | 1.2 | 5 | 80.3 | 159.0 | 7.5 | 40.8 | | | | | | | 0.17 | 400 | 0 | |
| 06/23 | | | | | | | | | | | | | | | 0 | |
| 07/21 | | | | | | | | | | | | | | | 0 | |
| 08/18 | 1.7 | 5 | 90.0 | 155.0 | 7.5 | 39.9 | | | | | | | 0.20 | 430 | 0 | |
| 10/27 | | | | | | | | | | | | | | | 0 | |
| 11/12 | 1.7 | 5 | 97.2 | 161.8 | 7.5 | 39.3 | | | | | | | 0.18 | 460 | 0 | |
| 12/08 | | | | | | | | | | | | | | | 0 | |
| AVG. | 1.5 | 5 | 84.1 | 154.0 | 7.5 | 40.5 | | | | | | | 0.18 | 423 | 0 | |
| MAX. | 1.7 | 5 | 97.2 | 161.8 | 7.6 | 42.0 | | | | | | | 0.20 | 460 | 0 | |
| MIN. | 1.2 | 5 | 69.0 | 140.0 | 7.5 | 39.3 | | | | | | | 0.17 | 400 | 0 | |

QUABBIN LABORATORY RECORDS 1997

M.D.C. DRINKING WATER

| SAMPLE SITE | DATE | LEAD (METHOD) (200.9) | COPPER (METHOD) (200.7) |
|---|---|---|---|
| VISITOR CENTER - AT FOUNTAIN | 06/26 | 0.004 | 0.044 |
| ADMINISTRATION OFFICE - AT FOUNTAIN | 06/26 | 0.004 | 0.031 |
| GARAGE - AT TAP | 06/26 | 0.007 | 0.089 |
| ENGINEERING (2nd floor) AT TAP | 06/26 | 0.003 | 0.726 |
| EAST WING - AT KITCHEN SINK | 06/26 | 0.006 | 0.033 |

| SAMPLE SITE | DATE | LEAD | COPPER |
|---|---|---|---|
| RANGER STATION - AT KITCHEN SINK ------ 1st DRAW | 06/26 | 0.018 | 2.550 |
| RANGER STATION - AT KITCHEN SINK ------ 1st DRAW | 09/23 | 0.023 | 3.79 |
| RANGER STATION - AT KITCHEN SINK - AFTER 1 MIN. | 09/23 | 0.002 | 1.88 |
| RANGER STATION - AT KITCHEN SINK - AFTER 2 MIN. | 09/23 | 0.003 | 2.86 |
| RANGER STATION - AT KITCHEN SINK - AFTER 5 MIN. | 09/23 | 0.002 | 1.50 |
| RANGER STATION - AT BASEMENT SINK ------ 1 st DRAW | 09/23 | 0.020 | 3.63 |
| RANGER STATION - AT BASEMENT SINK - AFTER 1 MIN. | 09/23 | 0.003 | 2.02 |

| SAMPLE SITE | DATE | NITRATE (METHOD) (4500-NO3-D) |
|---|---|---|
| HANGER TAP | 11/20 | 1.5 |

# 9.0 SPECIAL INVESTIGATIONS

QUABBIN LABORATORY RECORDS 1997
SPECIAL SAMPLES

BACTERIA SAMPLING ON QUABBIN RESERVOIR - RELATING TO GULLS
COLLECTED 12/3/97

| SITE | DEPTH - M | FECCOLI per 100 ml | FECCOLI X10 |
|---|---|---|---|
| R1 | SURFACE | TNTC | 670 |
| R1 | SURFACE | TNTC | 640 |
| R1 | 1 M | TNTC | 260 |
| R1 | 1 M | TNTC | 190 |
| R1 | 5 M | 18 | 30 |
| R1 | 5 M | 9 | 20 |
| R1 | 15 M | 53 | 20 |
| R1 | 15 M | 58 | 20 |
| R1 | 30 M | 15 | 30 |
| R1 | 30 M | 8 | 20 |

| SITE | DEPTH - M | FECCOLI per 100 ml | FECCOLI X10 |
|---|---|---|---|
| R2 | SURFACE | 16 | 10 |
| R2 | SURFACE | 21 | 0 |
| R2 | 1 M | 12 | 50 |
| R2 | 1 M | 16 | 10 |
| R2 | 5 M | 5 | 10 |
| R2 | 5 M | 10 | 0 |
| R2 | 15 M | 8 | 10 |
| R2 | 15 M | 8 | 10 |
| R2 | 30 M | 10 | 30 |
| R2 | 30 M | 6 | 10 |

| SITE | DEPTH - M | FECCOLI per 100 ml | FECCOLI X10 |
|---|---|---|---|
| R3 | SURFACE | 3 | 20 |
| R3 | SURFACE | 4 | 20 |
| R3 | 1 M | 6 | 20 |
| R3 | 1 M | 5 | 0 |
| R3 | 5 M | 3 | 0 |
| R3 | 5 M | 4 | 0 |
| R3 | 15 M | 2 | 0 |
| R3 | 15 M | 3 | 0 |
| R3 | 30 M | 2 | 10 |
| R3 | 30 M | 6 | 10 |

| | | | |
|---|---|---|---|
| BACK | 1 M | 1 | |
| | 1 M | 2 | |
| | 15 M | 1 | |
| | 15 M | 1 | |

BLANKS #1 + #2 LEFT 0 + 0

BLANKS #1 + #2 RIGHT 0 + 0

QUABBIN LABORATORY RECORDS 1997
SPECIAL SAMPLES

BACTERIA SAMPLING ON QUABBIN RESERVOIR - RELATING TO GULLS
SAMPLE SITES SELECTED BY U. MASS AND RECORDED WITH G.P.S.

| SITE | DEPTH - M | DATE | FECCOLI per 100 ml | FECCOLI X10 | FECCOLI X100 |
|---|---|---|---|---|---|
| 202 (FOR CONTROL) | SURFACE | 04/11 | 0 | | |
| 202 (FOR CONTROL) | 3.0 | 04/11 | 0 | | |
| 202 (FOR CONTROL) | 7.0 | 04/11 | 0 | | |
| 202 (FOR CONTROL) | 10.0 | 04/11 | 0 | | |
| 202 (FOR CONTROL) | 15.0 | 04/11 | 0 | | |
| S2 | SURFACE | 04/11 | 70 | 60 | 0 |
| S2 | 1.0 | 04/11 | 26 | 30 | 0 |
| S2 | 3.0 | 04/11 | 35 | 50 | 100 |
| S2 | 5.0 | 04/11 | 24 | 50 | 0 |
| S2 | 7.0 | 04/11 | 25 | 10 | 100 |
| S2 | 10.0 | 04/11 | 24 | 20 | 0 |
| S2 | 15.0 | 04/11 | 23 | 20 | 100 |
| S3 | SURFACE | 04/11 | 89 | 120 | 100 |
| S3 | 1.0 | 04/11 | 30 | 10 | 0 |
| S3 | 3.0 | 04/11 | 11 | 10 | 100 |
| S3 | 5.0 | 04/11 | 6 | 0 | 0 |
| S3 | 7.0 | 04/11 | 7 | 20 | 0 |
| S3 | 10.0 | 04/11 | 5 | 10 | 0 |
| S3 | 15.0 | 04/11 | 2 | 0 | 0 |
| S7 (FOR CONTROL) | SURFACE | 04/12 | 0 | | |
| S7 (FOR CONTROL) | 1.0 | 04/12 | 0 | | |
| S7 (FOR CONTROL) | 5.0 | 04/12 | 0 | | |
| S7 (FOR CONTROL) | 10.0 | 04/12 | 2 | | |
| S7 (FOR CONTROL) | 15.0 | 04/12 | 0 | | |
| S7 (FOR CONTROL) | 20.0 | 04/12 | 0 | | |
| S8 | SURFACE | 04/12 | 56 | 30 | 0 |
| S8 | 1.0 | 04/12 | 39 | 40 | 0 |
| S8 | 5.0 | 04/12 | 35 | 50 | 0 |
| S8 | 10.0 | 04/12 | 25 | 10 | 0 |
| S8 | 15.0 | 04/12 | 21 | 20 | 0 |
| S8 | 20.0 | 04/12 | 26 | 40 | 100 |
| 202 | 1.0 | 04/15 | 0 | | |
| 202 | 5.0 | 04/15 | 0 | | |
| 202 | 10.0 | 04/15 | 1 | | |
| 202 | 15.0 | 04/15 | 1 | | |
| 202 | 20.0 | 04/15 | 0 | | |

CONTINUED TOP RIGHT

| SITE | DEPTH - M | DATE | FECCOLI per 100 ml | FECCOLI X10 | FECCOLI X100 |
|---|---|---|---|---|---|
| B2 | 1.0 | 04/15 | 0 | | |
| B2 | 5.0 | 04/15 | 0 | | |
| B2 | 10.0 | 04/15 | 0 | | |
| B2 | 15.0 | 04/15 | 0 | | |
| B2 | 20.0 | 04/15 | 0 | | |
| B3 | 1.0 | 04/15 | 0 | | |
| B3 | 5.0 | 04/15 | 0 | | |
| B3 | 10.0 | 04/15 | 1 | | |
| B3 | 15.0 | 04/15 | 0 | | |
| B3 | 20.0 | 04/15 | 0 | | |
| B4 | 1.0 | 04/15 | 4 | | |
| B4 | 5.0 | 04/15 | 3 | | |
| B4 | 10.0 | 04/15 | 5 | | |
| B4 | 15.0 | 04/15 | 11 | | |
| B4 | 20.0 | 04/15 | 1 | | |
| B1 | 1.0 | 04/17 | 3 | | |
| B1 | 5.0 | 04/17 | 8 | | |
| B1 | 10.0 | 04/17 | 4 | | |
| B1 | 15.0 | 04/17 | 5 | | |
| B1 | 20.0 | 04/17 | 7 | | |
| B2 | 5.0 | 04/17 | 0 | | |
| B3 | 1.0 | 04/17 | 7 | | |
| B3 | 5.0 | 04/17 | 10 | | |
| B3 | 10.0 | 04/17 | 10 | | |
| B3 | 15.0 | 04/17 | 5 | | |
| B3 | 20.0 | 04/17 | 3 | | |
| B4 | 1.0 | 04/17 | 2 | | |
| B4 | 5.0 | 04/17 | 3 | | |
| B4 | 10.0 | 04/17 | 1 | | |
| B4 | 15.0 | 04/17 | 2 | | |
| B4 | 20.0 | 04/17 | 1 | | |
| B6 | 1.0 | 04/17 | 0 | | |
| B6 | 5.0 | 04/17 | 2 | | |
| B6 | 10.0 | 04/17 | 1 | | |
| B6 | 15.0 | 04/17 | 1 | | |
| B6 | 20.0 | 04/17 | 0 | | |

QUABBIN LABORATORY RECORDS 1997
SPECIAL SAMPLES

| SITE | DATE | FECCOLI per 100 ml | FECCOLI X10 |
|---|---|---|---|
| (TRIB. OF 213) | | | |
| S1 - BROWN'S HILL | 01/02 | 2 | |
| S2 - BROWN'S HILL | 01/02 | 4 | |
| S3 - BROWN'S HILL | 01/02 | 14 | |
| S4 - BROWN'S HILL | 01/02 | | 30 |
| S5 - BROWN'S HILL | 01/02 | | 20 |
| S6 - BROWN'S HILL | 01/02 | | 10 |
| S6B - BROWN'S HILL | 01/02 | | 20 |
| S7 - BROWN'S HILL | 01/02 | | 80 |
| S1 - BROWN'S HILL | 01/07 | 1 | |
| S2 - BROWN'S HILL | 01/07 | 2 | |
| S3 - BROWN'S HILL | 01/07 | 2 | |
| S4 - BROWN'S HILL | 01/07 | | 0 |
| S5 - BROWN'S HILL | 01/07 | | 0 |
| S6 - BROWN'S HILL | 01/07 | | 0 |
| S6B - BROWN'S HILL | 01/07 | | 10 |
| S7 - BROWN'S HILL | 01/07 | | 30 |
| S1 - BROWN'S HILL | 01/14 | 0 | |
| S2 - BROWN'S HILL | 01/14 | 1 | |
| S3 - BROWN'S HILL | 01/14 | 0 | |
| S4 - BROWN'S HILL | 01/14 | 5 | |
| S5 - BROWN'S HILL | 01/14 | 3 | |
| S6 - BROWN'S HILL | 01/14 | 11 | |
| S6B - BROWN'S HILL | 01/14 | 1 | |
| S7 - BROWN'S HILL | 01/14 | 15 | |
| S1 - BROWN'S HILL | 01/22 | 1 | |
| S2 - BROWN'S HILL | 01/22 | 6 | |
| S3 - BROWN'S HILL | 01/22 | 1 | |
| S4 - BROWN'S HILL | 01/22 | 6 | |
| S5 - BROWN'S HILL | 01/22 | 3 | |
| S6 - BROWN'S HILL | 01/22 | 4 | |
| S6B - BROWN'S HILL | 01/22 | 5 | |
| S7 - BROWN'S HILL | 01/22 | 14 | |

| SITE | DATE | FECCOLI per 100 ml | FECCOLI X10 |
|---|---|---|---|
| CRAMER POND OUTLET - TRIB. OF 212 | 07/28 | TNTC | 880 |
| GATES BK. - AT MOUTH | 12/19 | 20 | |
| | 12/22 | 13 | |
| MAIN ST. HUBBARDSTON - TRIB OF W. BR. OF WARE RIVER (ELM ST. TRIB.) | | | |
| SHEET 8-A, PARCEL 12A | 01/08 | 39 | 50 |

CULVERT REPLACEMENT - JENNISON RD. - WENDELL

| SITE | DATE | TURBIDITY |
|---|---|---|
| CULVERT REPLACEMENT | 11/10 | 0.8 |
| JENNISON RD. WENDELL - TRIB OF 211 | 11/11 | 2.2 |
| | 11/12 | 30.0 |
| | 11/13 | 3.7 |
| | 11/18 | 0.5 |
| | 11/19 | 48.0 |
| | 11/20 | 2.0 |
| | 11/24 | 0.4 |

QUABBIN LABORATORY RECORDS 1997
GIARDIA RELATED INFORMATION
201 - C.V.A.

| DATE | TURBIDITY | TEMP. C | TOTCOLI | FECCOLI |
|---|---|---|---|---|
| 01/13 | 0.3 | 5 | 1 | 0 |
| 01/27 | 0.3 | 3 | 3 | 2 |
| 02/10 | 0.2 | 3 | 1 | 1 |
| 02/24 | 0.3 | 2 | 3 | 2 |
| 03/10 | 0.2 | 2 | 0 | 0 |
| 03/24 | 0.3 | 2 | 2 | 2 |
| 04/07 | 0.2 | 5 | 1 | 1 |
| 04/22 | 0.3 | 6 | 4 | 0 |
| 05/05 | 0.2 | 7 | 1 | 0 |
| 05/19 | 0.3 | 9 | 3 | 1 |
| 06/02 | 0.3 | 12 | 0 | 0 |
| 06/23 | 0.3 | 12 | 2 | 0 |
| 07/14 | 0.3 | 12 | 1 | 0 |
| 07/28 | 0.3 | 13 | 0 | 0 |
| 08/11 | 0.3 | 13 | 0 | 0 |
| 08/25 | 0.3 | 12 | 3 | 0 |
| 09/08 | 0.3 | 14 | 9 | 0 |
| 09/22 | 0.3 | 13 | 0 | 0 |
| 10/06 | 0.3 | 15 | 20 | 0 |
| 10/20 | 0.3 | 15 | 28 | 0 |
| 11/03 | 0.3 | 12 | 49 | 2 |
| 11/17 | 0.3 | 10 | 30 | 2 |
| 12/01 | 0.3 | 9 | 16 | 1 |
| 12/15 | 0.3 | 6 | 3 | 1 |

QUABBIN LABORATORY RECORDS 1997
12/9/97 PLANE CRASH - WITHIN QUABBIN RESERVOIR WATER - SOUTH OF TARGET ISLAND

(V.O.C.) VOLATILE ORGANIC CONTAMINANT REPORT

| DATE | SAMPLE SITE | TIME | BY BOAT/CANOE | METHOD | RESULTS ug/L (all compounds) |
|---|---|---|---|---|---|
| 12/10/97 | CRASH SITE | AM | BOAT | 5520B | OIL AND GREASE - ND |
| 12/11/97 | 201 POWER STATION TAP | 1:10 PM | | 524.2 | ND |
| 12/11/97 | 201 POWER STATION TAP (DUP) | 1:12 PM | | 524.2 | ND |
| 12/11/97 | ENFIELD CHANNEL | 1:30 PM | BOAT | 524.2 | ND |
| 12/11/97 | ENFIELD CHANNEL (DUP) | 1:30 PM | BOAT | 524.2 | ND |
| 12/11/97 | 206 SHAFT #12 | 1:50 PM | BOAT | 524.2 | 1,2,3,TRICHLOROBENZENE - 0.5 |
| 12/11/97 | 206 SHAFT #12 (DUP) | 1:50 PM | BOAT | 524.2 | ND |
| 12/11/97 | CRASH SITE | 2:15 PM | BOAT | 524.2 | ND |
| 12/11/97 | CRASH SITE (DUP) | 2:15 PM | BOAT | 524.2 | ND |
| 12/11/97 | DISTILLED BLANK | 3:00 PM | | 524.2 | ND |
| 12/11/97 | DISTILLED BLANK (DUP) | 3:00 PM | | 524.2 | ND |
| 12/18/97 | 206 SHAFT #12 (SHORE) | 10:30 AM | | 524.2 | ND |
| 12/18/97 | 206 SHAFT #12 (SHORE) | 10:30 AM | | 524.2 | ND |
| 12/18/97 | 206 SHAFT #12 (BOAT) | 10:20 AM | BOAT | 524.2 | ND |
| 12/18/97 | 206 SHAFT #12 (BOAT) | 10:20 AM | BOAT | 524.2 | ND |
| 12/18/97 | 206 SHAFT #12 (CANOE) | 10:15 AM | CANOE | 524.2 | ND |
| 12/18/97 | 206 SHAFT #12 (CANOE) | 10:15 AM | CANOE | 524.2 | ND |
| 12/18/97 | TRIP BLANK | 8:15 AM | | 524.2 | ND |
| 12/18/97 | TRIP BLANK | 8:15 AM | | 524.2 | ND |

ND = NOT DETECTED
DETECTION LIMIT 0.4 ug/L

# 10.0 QUABBIN RESERVOIR STATIONS

QUABBIN LABORATORY RECORDS 1997
(202) WINSOR DAM --- RESERVOIR

| DATE | DEPTH-M | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI | ELEV | INTAKE M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 04/16 | 0.0 | | | | | | | | | | | | | | | 0 | 0 | 530.35 | 19.1 |
| 04/16 | 0.5 | 0.3 | 5 | 6.2 | 9.9 | 6.63 | 4.4 | 2.2 | 13.01 | 101 | 4.42 | 23 | 14 | 0.03 | 46 | | | | |
| 04/16 | 3.0 | | | | | | | | 13.01 | 101 | 4.35 | | | | 46 | | | | |
| 04/16 | 6.0 | | | | | | | | 12.96 | 101 | 4.32 | | | | 46 | | | | |
| 04/16 | 9.0 | | | | | | | | 12.95 | 100 | 4.22 | | | | 46 | | | | |
| 04/16 | 12.0 | | | | | | | | 13.00 | 100 | 4.13 | | | | 46 | | | | |
| 04/16 | 15.0 | | | | | | | | 13.00 | 100 | 4.14 | | | | 46 | | | | |
| 04/16 | 18.0 | | | | | | | | 12.98 | 100 | 4.11 | | | | 46 | | | | |
| 04/16 | 21.0 | | | | | | | | 12.93 | 100 | 4.10 | | | | 47 | | | | |
| 04/16 | 24.0 | | | | | | | | 12.94 | 100 | 4.05 | | | | 46 | | | | |
| 04/16 | 27.0 | | | | | | | | 12.89 | 99 | 4.06 | | | | 46 | | | | |
| 04/16 | 30.0 | | | | | | | | 12.89 | 99 | 4.05 | | | | 46 | | | | |
| 04/16 | 33.0 | | | | | | | | 12.88 | 99 | 4.02 | | | | 46 | | | | |
| 04/16 | 36.0 | | | | | | | | 12.86 | 99 | 4.02 | | | | 46 | | | | |
| 04/16 | 39.0 | | | | | | | | 12.88 | 99 | 3.98 | | | | 46 | | | | |
| 04/16 | 41.0 | 0.3 | 5 | 6.3 | 10.4 | 6.58 | 4.2 | 2.3 | 12.84 | 99 | 3.95 | 24 | 16 | 0.03 | 45 | | | | |
| 05/21 | 0.0 | | | | | | | | | | | | | | | 1 | 0 | 530.14 | 19.0 |
| 05/21 | 0.5 | 0.3 | 5 | 5.0 | 8.0 | 6.71 | 4.4 | 2.9 | 11.47 | 102 | 10.10 | 25 | 15 | 0.03 | 43 | | | | |
| 05/21 | 3.0 | | | | | 6.71 | | | 11.40 | 101 | 9.94 | | | | 43 | | | | |
| 05/21 | 6.0 | | | | | 6.69 | | | 11.39 | 101 | 9.87 | | | | 43 | | | | |
| 05/21 | 9.0 | | | | | 6.70 | | | 11.39 | 101 | 9.83 | | | | 43 | | | | |
| 05/21 | 12.0 | | | | | 6.70 | | | 11.39 | 100 | 9.67 | | | | 43 | | | | |
| 05/21 | 15.0 | | | | | 6.74 | | | 11.60 | 100 | 8.62 | | | | 43 | | | | |
| 05/21 | 18.0 | | | | | 6.74 | | | 11.70 | 99 | 8.10 | | | | 43 | | | | |
| 05/21 | 21.0 | | | | | 6.71 | | | 11.70 | 99 | 7.89 | | | | 43 | | | | |
| 05/21 | 24.0 | | | | | 6.68 | | | 11.72 | 98 | 7.70 | | | | 43 | | | | |
| 05/21 | 27.0 | | | | | 6.66 | | | 11.70 | 98 | 7.41 | | | | 43 | | | | |
| 05/21 | 30.0 | | | | | 6.60 | | | 11.65 | 96 | 7.07 | | | | 43 | | | | |
| 05/21 | 33.0 | | | | | 6.57 | | | 11.64 | 96 | 7.03 | | | | 43 | | | | |
| 05/21 | 36.0 | | | | | 6.55 | | | 11.61 | 96 | 7.00 | | | | 43 | | | | |
| 05/21 | 39.0 | | | | | 6.53 | | | 11.60 | 96 | 6.97 | | | | 43 | | | | |
| 05/21 | 40.0 | 0.3 | 5 | 5.0 | 8.2 | 6.52 | 4.2 | 2.6 | 11.60 | 96 | 6.95 | 25 | 16 | 0.03 | 43 | | | | |
| 06/11 | 0.0 | | | | | | | | | | | | | | | 3 | 0 | 529.63 | 18.9 |
| 06/11 | 1.0 | 0.3 | 5 | 5.2 | 11.0 | 6.81 | 4.3 | 2.5 | 9.90 | 102 | 16.84 | 28 | 18 | 0.03 | 45 | | | | |
| 06/11 | 2.0 | | | | | 6.83 | | | 9.97 | 102 | 16.58 | | | | 44 | | | | |
| 06/11 | 3.0 | | | | | 6.85 | | | 10.00 | 102 | 16.31 | | | | 44 | | | | |
| 06/11 | 4.0 | | | | | 6.86 | | | 10.15 | 103 | 15.93 | | | | 45 | | | | |
| 06/11 | 5.0 | | | | | 6.88 | | | 10.20 | 102 | 15.46 | | | | 45 | | | | |
| 06/11 | 6.0 | | | | | 6.89 | | | 10.33 | 102 | 15.05 | | | | 44 | | | | |
| 06/11 | 7.0 | | | | | 6.92 | | | 10.46 | 101 | 14.24 | | | | 44 | | | | |
| 06/11 | 8.0 | | | | | 6.94 | | | 10.50 | 102 | 14.02 | | | | 44 | | | | |
| 06/11 | 9.0 | | | | | 6.93 | | | 10.59 | 101 | 13.62 | | | | 44 | | | | |
| 06/11 | 10.0 | | | | | 6.93 | | | 10.63 | 102 | 13.27 | | | | 44 | | | | |
| 06/11 | 11.0 | | | | | 6.93 | | | 10.75 | 102 | 12.90 | | | | 44 | | | | |
| 06/11 | 12.0 | | | | | 6.93 | | | 10.82 | 101 | 12.56 | | | | 43 | | | | |
| 06/11 | 13.0 | | | | | 6.93 | | | 10.90 | 101 | 12.14 | | | | 44 | | | | |
| 06/11 | 14.0 | | | | | 6.93 | | | 11.05 | 101 | 11.34 | | | | 44 | | | | |
| 06/11 | 15.0 | | | | | 6.92 | | | 11.05 | 99 | 10.75 | | | | 44 | | | | |
| 06/11 | 16.0 | | | | | 6.90 | | | 11.11 | 100 | 10.44 | | | | 44 | | | | |
| 06/11 | 17.0 | | | | | 6.86 | | | 11.22 | 99 | 10.00 | | | | 44 | | | | |
| 06/11 | 18.0 | | | | | 6.81 | | | 11.15 | 99 | 9.80 | | | | 44 | | | | |
| 06/11 | 19.0 | | | | | 6.78 | | | 11.15 | 98 | 9.65 | | | | 44 | | | | |
| 06/11 | 20.0 | | | | | 6.76 | | | 11.13 | 98 | 9.49 | | | | 44 | | | | |
| 06/11 | 21.0 | | | | | 6.71 | | | 11.13 | 98 | 9.29 | | | | 44 | | | | |
| 06/11 | 22.0 | | | | | 6.71 | | | 11.13 | 97 | 9.19 | | | | 44 | | | | |
| 06/11 | 23.0 | | | | | 6.65 | | | 11.13 | 97 | 8.94 | | | | 44 | | | | |
| 06/11 | 24.0 | | | | | 6.59 | | | 11.10 | 95 | 8.63 | | | | 44 | | | | |
| 06/11 | 25.0 | | | | | 6.55 | | | 11.09 | 95 | 8.51 | | | | 44 | | | | |

QUABBIN LABORATORY RECORDS 1997
(202) WINSOR DAM --- RESERVOIR

| DATE | DEPTH-M | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI | ELEV | INTAKE M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 06/11 | 26.0 | | | | | 6.55 | | | 11.05 | 95 | 8.39 | | | | 44 | | | | |
| 06/11 | 27.0 | | | | | 6.53 | | | 11.05 | 94 | 8.24 | | | | 44 | | | | |
| 06/11 | 28.0 | | | | | 6.50 | | | 11.05 | 94 | 8.02 | | | | 44 | | | | |
| 06/11 | 29.0 | | | | | 6.49 | | | 11.03 | 93 | 7.96 | | | | 44 | | | | |
| 06/11 | 30.0 | | | | | 6.47 | | | 11.00 | 93 | 7.79 | | | | 44 | | | | |
| 06/11 | 31.0 | | | | | 6.45 | | | 10.98 | 92 | 7.63 | | | | 44 | | | | |
| 06/11 | 32.0 | | | | | 6.40 | | | 10.84 | 91 | 7.48 | | | | 44 | | | | |
| 06/11 | 33.0 | | | | | 6.37 | | | 10.81 | 91 | 7.40 | | | | 44 | | | | |
| 06/11 | 34.0 | | | | | 6.37 | | | 10.75 | 90 | 7.38 | | | | 44 | | | | |
| 06/11 | 35.0 | | | | | 6.35 | | | 10.72 | 90 | 7.32 | | | | 44 | | | | |
| 06/11 | 36.0 | | | | | 6.33 | | | 10.71 | 90 | 7.30 | | | | 44 | | | | |
| 06/11 | 37.0 | | | | | 6.33 | | | 10.69 | 90 | 7.28 | | | | 44 | | | | |
| 06/11 | 38.0 | | | | | 6.32 | | | 10.63 | 88 | 7.25 | | | | 44 | | | | |
| 06/11 | 39.0 | 0.3 | 5 | 5.4 | 10.9 | 6.30 | 4.1 | 2.2 | 10.62 | 88 | 7.20 | 29 | 20 | 0.03 | 44 | | | | |
| 06/11 | 40.0 | | | | | 6.28 | | | 10.56 | 87 | 7.19 | | | | 44 | | | | |
| 07/16 | 0.0 | | | | | | | | | | | | | | | 2 | 0 | 528.35 | 18. |
| 07/16 | 1.0 | | | | | 6.84 | | | 8.25 | 98 | 24.66 | | | | 45 | | | | |
| 07/16 | 2.0 | | | | | 6.84 | | | 8.18 | 97 | 24.63 | | | | 45 | | | | |
| 07/16 | 3.0 | 0.3 | 5 | 7.0 | 9.0 | 6.88 | 4.1 | 2.4 | 8.31 | 98 | 24.08 | 28 | 17 | 0.03 | 45 | | | | |
| 07/16 | 4.0 | | | | | 6.90 | | | 8.38 | 98 | 23.88 | | | | 45 | | | | |
| 07/16 | 5.0 | | | | | 6.92 | | | 8.48 | 100 | 23.78 | | | | 45 | | | | |
| 07/16 | 6.0 | | | | | 6.95 | | | 8.55 | 100 | 23.66 | | | | 45 | | | | |
| 07/16 | 7.0 | | | | | 7.00 | | | 8.70 | 100 | 22.65 | | | | 45 | | | | |
| 07/16 | 8.0 | | | | | 7.02 | | | 8.84 | 99 | 21.62 | | | | 44 | | | | |
| 07/16 | 9.0 | | | | | 7.18 | | | 10.21 | 107 | 17.68 | | | | 44 | | | | |
| 07/16 | 10.0 | | | | | 7.28 | | | 10.73 | 107 | 15.38 | | | | 45 | | | | |
| 07/16 | 11.0 | | | | | 7.29 | | | 10.96 | 106 | 14.13 | | | | 45 | | | | |
| 07/16 | 12.0 | | | | | 7.29 | | | 11.10 | 105 | 13.20 | | | | 45 | | | | |
| 07/16 | 13.0 | | | | | 7.28 | | | 11.14 | 104 | 12.69 | | | | 45 | | | | |
| 07/16 | 14.0 | | | | | 7.26 | | | 11.17 | 103 | 12.22 | | | | 45 | | | | |
| 07/16 | 15.0 | | | | | 7.20 | | | 11.22 | 104 | 11.85 | | | | 45 | | | | |
| 07/16 | 16.0 | | | | | 7.13 | | | 11.08 | 102 | 11.56 | | | | 45 | | | | |
| 07/16 | 17.0 | | | | | 7.05 | | | 11.03 | 100 | 11.20 | | | | 45 | | | | |
| 07/16 | 18.0 | | | | | 6.93 | | | 10.92 | 99 | 10.83 | | | | 45 | | | | |
| 07/16 | 19.0 | | | | | 6.86 | | | 10.90 | 98 | 10.65 | | | | 46 | | | | |
| 07/16 | 20.0 | | | | | 6.78 | | | 10.89 | 98 | 10.49 | | | | 45 | | | | |
| 07/16 | 21.0 | | | | | 6.71 | | | 10.84 | 96 | 10.20 | | | | 46 | | | | |
| 07/16 | 22.0 | | | | | 6.67 | | | 10.80 | 96 | 10.01 | | | | 45 | | | | |
| 07/16 | 23.0 | | | | | 6.60 | | | 10.70 | 95 | 9.91 | | | | 45 | | | | |
| 07/16 | 24.0 | | | | | 6.54 | | | 10.60 | 93 | 9.70 | | | | 45 | | | | |
| 07/16 | 25.0 | | | | | 6.51 | | | 10.55 | 93 | 9.45 | | | | 45 | | | | |
| 07/16 | 26.0 | 0.3 | 5 | 6.2 | 10.0 | 6.46 | 3.8 | 2.0 | 10.50 | 92 | 9.28 | 28 | 18 | 0.03 | 45 | | | | |
| 07/16 | 27.0 | | | | | 6.45 | | | 10.49 | 91 | 9.16 | | | | 45 | | | | |
| 07/16 | 28.0 | | | | | 6.43 | | | 10.47 | 91 | 9.09 | | | | 46 | | | | |
| 07/16 | 29.0 | | | | | 6.39 | | | 10.39 | 90 | 8.94 | | | | 46 | | | | |
| 07/16 | 30.0 | | | | | 6.38 | | | 10.34 | 90 | 8.88 | | | | 45 | | | | |
| 07/16 | 31.0 | | | | | 6.34 | | | 10.30 | 89 | 8.78 | | | | 46 | | | | |
| 07/16 | 32.0 | | | | | 6.31 | | | 10.12 | 87 | 8.58 | | | | 46 | | | | |
| 07/16 | 33.0 | | | | | 6.29 | | | 10.07 | 86 | 8.42 | | | | 46 | | | | |
| 07/16 | 34.0 | | | | | 6.27 | | | 10.02 | 86 | 8.30 | | | | 46 | | | | |
| 07/16 | 35.0 | | | | | 6.23 | | | 9.91 | 84 | 8.19 | | | | 45 | | | | |
| 07/16 | 36.0 | | | | | 6.21 | | | 9.81 | 83 | 8.07 | | | | 46 | | | | |
| 07/16 | 37.0 | | | | | 6.21 | | | 9.78 | 83 | 8.04 | | | | 46 | | | | |
| 07/16 | 38.0 | | | | | 6.19 | | | 9.67 | 82 | 7.99 | | | | 46 | | | | |
| 07/16 | 39.0 | | | | | 6.16 | | | 9.59 | 81 | 7.97 | | | | 46 | | | | |
| 07/16 | 40.0 | | | | | 6.14 | | | 9.47 | 80 | 7.92 | | | | 46 | | | | |
| 08/14 | 0.0 | | | | | | | | | | | | | | | 1 | 0 | 527.00 | 1 |
| 08/14 | 1.0 | | | | | 6.80 | | | 8.36 | 97 | 23.08 | | | | 49 | | | | |

JABBIN LABORATORY RECORDS 1997
02) WINSOR DAM --- RESERVOIR

| ATE | DEPTH-M | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI | ELEV | INTAKE M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| /14 | 2.0 | | | | | 6.81 | | | 8.27 | 96 | 23.05 | | | | 49 | | | | |
| /14 | 3.0 | | | | | 6.80 | | | 8.24 | 95 | 23.02 | | | | 49 | | | | |
| /14 | 4.0 | | | | | 6.81 | | | 8.24 | 95 | 23.02 | | | | 47 | | | | |
| /14 | 5.0 | 0.3 | 5 | 5.1 | 10.1 | 6.81 | 4.2 | 2.3 | 8.22 | 95 | 23.02 | 27 | 16 | 0.03 | 47 | | | | |
| /14 | 6.0 | | | | | 6.82 | | | 8.22 | 95 | 23.01 | | | | 47 | | | | |
| /14 | 7.0 | | | | | 6.82 | | | 8.22 | 95 | 22.97 | | | | 47 | | | | |
| /14 | 8.0 | | | | | 6.82 | | | 8.61 | 99 | 22.46 | | | | 47 | | | | |
| /14 | 9.0 | | | | | 6.84 | | | 9.07 | 102 | 21.28 | | | | 47 | | | | |
| /14 | 10.0 | | | | | 6.85 | | | 9.58 | 106 | 20.42 | | | | 47 | | | | |
| /14 | 11.0 | | | | | 6.95 | | | 10.15 | 108 | 18.45 | | | | 47 | | | | |
| /14 | 12.0 | | | | | 7.07 | | | 10.62 | 110 | 17.18 | | | | 47 | | | | |
| /14 | 13.0 | | | | | 7.17 | | | 11.01 | 109 | 15.07 | | | | 46 | | | | |
| /14 | 14.0 | | | | | 7.16 | | | 11.02 | 107 | 14.04 | | | | 47 | | | | |
| /14 | 15.0 | | | | | 7.11 | | | 11.08 | 106 | 13.31 | | | | 47 | | | | |
| /14 | 16.0 | | | | | 7.10 | | | 11.16 | 105 | 12.72 | | | | 47 | | | | |
| /14 | 17.0 | | | | | 7.02 | | | 11.06 | 102 | 12.16 | | | | 47 | | | | |
| /14 | 18.0 | | | | | 6.96 | | | 11.16 | 102 | 11.70 | | | | 47 | | | | |
| /14 | 19.0 | | | | | 6.91 | | | 11.15 | 102 | 11.40 | | | | 47 | | | | |
| /14 | 20.0 | | | | | 6.88 | | | 11.05 | 100 | 11.03 | | | | 47 | | | | |
| /14 | 21.0 | | | | | 6.66 | | | 10.52 | 94 | 10.65 | | | | 47 | | | | |
| /14 | 22.0 | | | | | 6.49 | | | 10.23 | 92 | 10.44 | | | | 47 | | | | |
| /14 | 23.0 | | | | | 6.42 | | | 10.18 | 91 | 10.28 | | | | 47 | | | | |
| /14 | 24.0 | | | | | 6.38 | | | 10.08 | 89 | 10.18 | | | | 47 | | | | |
| /14 | 25.0 | | | | | 6.35 | | | 10.02 | 89 | 10.00 | | | | 48 | | | | |
| /14 | 26.0 | 0.3 | 5 | 6.2 | 10.7 | 6.34 | 4.1 | 2.0 | 10.02 | 89 | 9.84 | 27 | 17 | 0.03 | 48 | | | | |
| /14 | 27.0 | | | | | 6.30 | | | 10.00 | 88 | 9.52 | | | | 47 | | | | |
| /14 | 28.0 | | | | | 6.28 | | | 9.80 | 85 | 9.25 | | | | 47 | | | | |
| /14 | 29.0 | | | | | 6.22 | | | 9.57 | 83 | 8.87 | | | | 48 | | | | |
| /14 | 30.0 | | | | | 6.18 | | | 9.50 | 83 | 8.81 | | | | 48 | | | | |
| /14 | 31.0 | | | | | 6.15 | | | 9.32 | 81 | 8.77 | | | | 48 | | | | |
| /14 | 32.0 | | | | | 6.10 | | | 9.13 | 78 | 8.50 | | | | 48 | | | | |
| /14 | 33.0 | | | | | 6.09 | | | 9.08 | 78 | 8.46 | | | | 48 | | | | |
| /14 | 34.0 | | | | | 6.09 | | | 8.98 | 77 | 8.32 | | | | 48 | | | | |
| /14 | 35.0 | | | | | 6.04 | | | 8.64 | 73 | 8.20 | | | | 48 | | | | |
| /14 | 36.0 | | | | | 6.01 | | | 8.65 | 73 | 8.16 | | | | 48 | | | | |
| /14 | 37.0 | | | | | 6.01 | | | 8.62 | 73 | 8.11 | | | | 48 | | | | |
| /14 | 38.0 | | | | | 6.00 | | | 8.41 | 71 | 8.05 | | | | 48 | | | | |
| /14 | 39.0 | | | | | 5.98 | | | 8.24 | 70 | 8.03 | | | | 48 | | | | |
| /17 | 0.0 | | | | | | | | | | | | | | | 3 | 0 | 525.62 | 17.7 |
| /17 | 1.0 | | | | | 6.85 | | | 8.46 | 95 | 21.51 | | | | 51 | | | | |
| /17 | 2.0 | | | | | 6.85 | | | 8.42 | 95 | 21.50 | | | | 51 | | | | |
| /17 | 3.0 | | | | | 6.85 | | | 8.42 | 95 | 21.49 | | | | 51 | | | | |
| /17 | 4.0 | | | | | 6.85 | | | 8.40 | 94 | 21.48 | | | | 51 | | | | |
| /17 | 5.0 | | | | | 6.86 | | | 8.40 | 94 | 21.49 | | | | 51 | | | | |
| /17 | 6.0 | 0.3 | 5 | 5.7 | 7.6 | 6.86 | 4.3 | 2.6 | 8.38 | 94 | 21.48 | 26 | 17 | 0.03 | 51 | | | | |
| /17 | 7.0 | | | | | 6.87 | | | 8.37 | 94 | 21.46 | | | | 51 | | | | |
| /17 | 8.0 | | | | | 6.87 | | | 8.37 | 94 | 21.46 | | | | 51 | | | | |
| /17 | 9.0 | | | | | 6.87 | | | 8.36 | 94 | 21.44 | | | | 51 | | | | |
| /17 | 10.0 | | | | | 6.89 | | | 8.36 | 94 | 21.36 | | | | 50 | | | | |
| /17 | 11.0 | | | | | 6.91 | | | 8.40 | 94 | 20.95 | | | | 50 | | | | |
| /17 | 12.0 | | | | | 6.90 | | | 8.41 | 93 | 20.65 | | | | 50 | | | | |
| /17 | 13.0 | | | | | 7.02 | | | 10.50 | 109 | 16.80 | | | | 50 | | | | |
| /17 | 14.0 | | | | | 7.04 | | | 10.60 | 105 | 15.19 | | | | 50 | | | | |
| /17 | 15.0 | | | | | 6.97 | | | 10.63 | 103 | 13.87 | | | | 50 | | | | |
| /17 | 16.0 | | | | | 6.86 | | | 10.45 | 99 | 13.14 | | | | 49 | | | | |
| /17 | 17.0 | | | | | 6.77 | | | 10.42 | 98 | 12.50 | | | | 49 | | | | |
| /17 | 18.0 | | | | | 6.66 | | | 10.30 | 95 | 12.20 | | | | 49 | | | | |
| /17 | 19.0 | | | | | 6.57 | | | 10.15 | 94 | 11.82 | | | | 50 | | | | |

QUABBIN LABORATORY RECORDS 1997
(202) WINSOR DAM --- RESERVOIR

| DATE | DEPTH-M | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI | ELEV | INTAKE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 09/17 | 20.0 | | | | | 6.53 | | | 10.12 | 93 | 11.52 | | | | 49 | | | | |
| 09/17 | 21.0 | | | | | 6.48 | | | 10.01 | 92 | 11.35 | | | | 50 | | | | |
| 09/17 | 22.0 | | | | | 6.44 | | | 9.85 | 89 | 11.18 | | | | 49 | | | | |
| 09/17 | 23.0 | | | | | 6.40 | | | 9.72 | 88 | 10.99 | | | | 49 | | | | |
| 09/17 | 24.0 | | | | | 6.34 | | | 9.40 | 84 | 10.70 | | | | 50 | | | | |
| 09/17 | 25.0 | | | | | 6.27 | | | 9.32 | 84 | 10.50 | | | | 49 | | | | |
| 09/17 | 26.0 | | | | | 6.24 | | | 9.14 | 82 | 10.32 | | | | 49 | | | | |
| 09/17 | 27.0 | | | | | 6.19 | | | 9.02 | 80 | 10.10 | | | | 49 | | | | |
| 09/17 | 28.0 | 0.3 | 5 | 5.9 | 10.2 | 6.19 | 4.4 | 2.6 | 9.00 | 80 | 9.94 | 26 | 18 | 0.03 | 49 | | | | |
| 09/17 | 29.0 | | | | | 6.18 | | | 8.95 | 79 | 9.77 | | | | 49 | | | | |
| 09/17 | 30.0 | | | | | 6.15 | | | 8.80 | 77 | 9.55 | | | | 49 | | | | |
| 09/17 | 31.0 | | | | | 6.12 | | | 8.64 | 76 | 9.32 | | | | 49 | | | | |
| 09/17 | 32.0 | | | | | 6.11 | | | 8.63 | 75 | 9.18 | | | | 49 | | | | |
| 09/17 | 33.0 | | | | | 6.08 | | | 8.42 | 73 | 8.99 | | | | 49 | | | | |
| 09/17 | 34.0 | | | | | 6.07 | | | 8.31 | 72 | 8.82 | | | | 49 | | | | |
| 09/17 | 35.0 | | | | | 6.07 | | | 8.24 | 71 | 8.72 | | | | 49 | | | | |
| 09/17 | 36.0 | | | | | 6.04 | | | 8.14 | 70 | 8.59 | | | | 49 | | | | |
| 09/17 | 37.0 | | | | | 6.03 | | | 7.89 | 68 | 8.49 | | | | 49 | | | | |
| 09/17 | 38.0 | | | | | 5.99 | | | 7.70 | 66 | 8.33 | | | | 49 | | | | |
| 09/17 | 39.0 | | | | | 5.99 | | | 7.63 | 66 | 8.33 | | | | 49 | | | | |
| 10/22 | 0.0 | | | | | | | | | | | | | | | 21 | 0 | 523.83 | 17 |
| 10/22 | 0.5 | 0.3 | 5 | 6.0 | 9.4 | 6.57 | 4.2 | 2.0 | 9.31 | 92 | 15.00 | 23 | 17 | 0.04 | 45 | | | | |
| 10/22 | 3.0 | | | | | 6.62 | | | 9.25 | 92 | 14.96 | | | | 45 | | | | |
| 10/22 | 6.0 | | | | | 6.62 | | | 9.21 | 91 | 14.94 | | | | 45 | | | | |
| 10/22 | 9.0 | | | | | 6.66 | | | 9.19 | 91 | 14.94 | | | | 45 | | | | |
| 10/22 | 12.0 | | | | | 6.66 | | | 9.16 | 91 | 14.94 | | | | 45 | | | | |
| 10/22 | 15.0 | | | | | 6.64 | | | 9.14 | 90 | 14.92 | | | | 44 | | | | |
| 10/22 | 18.0 | | | | | 6.15 | | | 8.16 | 76 | 12.20 | | | | 44 | | | | |
| 10/22 | 21.0 | | | | | 6.08 | | | 8.22 | 76 | 11.62 | | | | 44 | | | | |
| 10/22 | 24.0 | | | | | 6.06 | | | 8.16 | 75 | 11.14 | | | | 44 | | | | |
| 10/22 | 27.0 | | | | | 6.04 | | | 8.16 | 73 | 10.75 | | | | 43 | | | | |
| 10/22 | 30.0 | | | | | 6.02 | | | 7.88 | 70 | 10.03 | | | | 43 | | | | |
| 10/22 | 33.0 | | | | | 5.99 | | | 7.71 | 68 | 9.59 | | | | 44 | | | | |
| 10/22 | 36.0 | | | | | 5.94 | | | 7.00 | 61 | 9.00 | | | | 45 | | | | |
| 10/22 | 37.0 | 0.3 | 5 | 6.1 | 10.0 | 5.92 | 4.4 | 2.3 | 6.65 | 58 | 8.82 | 23 | 19 | 0.04 | 45 | | | | |
| 10/22 | 38.0 | | | | | 5.92 | | | 6.46 | 56 | 8.71 | | | | 45 | | | | |
| 11/19 | 0.0 | | | | | | | | | | | | | | | 11 | 0 | 523.57 | 1 |
| 11/19 | 0.5 | 0.3 | 5 | 6.8 | 7.8 | 6.72 | 4.4 | 2.8 | 9.77 | 87 | 10.01 | | | 0.04 | 45 | | | | |
| 11/19 | 3.0 | | | | | 6.66 | | | 9.75 | 86 | 9.78 | | | | 43 | | | | |
| 11/19 | 6.0 | | | | | 6.62 | | | 9.72 | 86 | 9.77 | | | | 43 | | | | |
| 11/19 | 9.0 | | | | | 6.61 | | | 9.27 | 81 | 9.74 | | | | 43 | | | | |
| 11/19 | 12.0 | | | | | 6.58 | | | 9.69 | 85 | 9.71 | | | | 43 | | | | |
| 11/19 | 15.0 | | | | | 6.58 | | | 9.67 | 85 | 9.68 | | | | 44 | | | | |
| 11/19 | 18.0 | | | | | 6.57 | | | 9.68 | 85 | 9.65 | | | | 44 | | | | |
| 11/19 | 21.0 | | | | | 6.56 | | | 9.69 | 85 | 9.64 | | | | 44 | | | | |
| 11/19 | 24.0 | | | | | 6.56 | | | 9.65 | 85 | 9.62 | | | | 44 | | | | |
| 11/19 | 27.0 | | | | | 6.55 | | | 9.66 | 85 | 9.62 | | | | 44 | | | | |
| 11/19 | 30.0 | | | | | 6.54 | | | 9.67 | 85 | 9.60 | | | | 44 | | | | |
| 11/19 | 33.0 | | | | | 6.54 | | | 9.65 | 85 | 9.59 | | | | 44 | | | | |
| 11/19 | 36.0 | | | | | 6.54 | | | 9.62 | 84 | 9.55 | | | | 44 | | | | |
| 11/19 | 37.0 | 0.3 | 5 | 6.5 | 8.0 | 6.54 | 3.9 | 2.1 | 9.63 | 85 | 9.53 | 25 | 16 | 0.06 | 44 | | | | |
| 11/19 | 38.0 | | | | | 6.54 | | | 9.64 | 85 | 9.50 | | | | 43 | | | | |
| | AVG. | 0.3 | 5 | 5.9 | 9.5 | 6.59 | 4.2 | 2.4 | 10.07 | 92 | 11.61 | 26 | 17 | 0.03 | 46 | 5 | 0 | | |
| | MAX. | 0.3 | 5 | 7.0 | 11.0 | 7.29 | 4.4 | 2.9 | 13.01 | 110 | 24.66 | 29 | 20 | 0.06 | 51 | 21 | 0 | | |
| | MIN. | 0.3 | 5 | 5.0 | 7.6 | 5.92 | 3.8 | 2.0 | 6.46 | 56 | 3.95 | 23 | 14 | 0.03 | 43 | 0 | 0 | | |

UABBIN LABORATORY RECORDS 1997
06) SHAFT #12 --- RESERVOIR

| ATE | DEPTH-M | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI | ELEV | INTAKE M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| l/16 | 0.0 | | | | | | | | 12.27 | 98 | 5.55 | | | | 46 | 1 | 0 | 530.35 | 24.8 |
| l/16 | 0.5 | 0.3 | 5 | 6.2 | 9.0 | 6.59 | 4.3 | 2.0 | 12.24 | 97 | 5.53 | 23 | 13 | 0.03 | 46 | | | | |
| l/16 | 3.0 | | | | | | | | 12.47 | 98 | 5.17 | | | | 47 | | | | |
| l/16 | 6.0 | | | | | | | | 12.47 | 98 | 5.07 | | | | 47 | | | | |
| l/16 | 9.0 | | | | | | | | 12.54 | 98 | 4.87 | | | | 46 | | | | |
| l/16 | 12.0 | | | | | | | | 12.66 | 98 | 4.72 | | | | 46 | | | | |
| l/16 | 15.0 | | | | | | | | 12.85 | 100 | 4.48 | | | | 46 | | | | |
| l/16 | 18.0 | | | | | | | | 12.81 | 99 | 4.42 | | | | 46 | | | | |
| l/16 | 21.0 | | | | | | | | 12.76 | 99 | 4.45 | | | | 46 | | | | |
| l/16 | 24.0 | | | | | | | | 12.77 | 99 | 4.39 | | | | 46 | | | | |
| l/16 | 27.0 | | | | | | | | 12.71 | 99 | 4.39 | | | | 46 | | | | |
| l/16 | 28.0 | 0.5 | 7 | 6.2 | 10.5 | 6.58 | 4.4 | 2.2 | 12.73 | 99 | 4.36 | 24 | 15 | 0.04 | 45 | | | | |
| 5/21 | 0.0 | | | | | | | | | | | | | | | 2 | 0 | 530.14 | 24.7 |
| 5/21 | 0.5 | 0.3 | 5 | 5.2 | 8.0 | 6.71 | 4.5 | 2.8 | 11.20 | 101 | 10.55 | 25 | 14 | 0.03 | 44 | | | | |
| 5/21 | 3.0 | | | | | 6.70 | | | 11.19 | 100 | 10.51 | | | | 44 | | | | |
| 5/21 | 6.0 | | | | | 6.70 | | | 11.24 | 100 | 10.18 | | | | 43 | | | | |
| 5/21 | 9.0 | | | | | 6.70 | | | 11.27 | 100 | 9.98 | | | | 43 | | | | |
| 5/21 | 12.0 | | | | | 6.71 | | | 11.50 | 100 | 9.03 | | | | 43 | | | | |
| 5/21 | 15.0 | | | | | 6.69 | | | 11.50 | 100 | 8.92 | | | | 42 | | | | |
| 5/21 | 18.0 | | | | | 6.69 | | | 11.46 | 100 | 8.86 | | | | 43 | | | | |
| 5/21 | 21.0 | | | | | 6.64 | | | 11.40 | 98 | 8.58 | | | | 42 | | | | |
| 5/21 | 24.0 | | | | | 6.61 | | | 11.39 | 98 | 8.39 | | | | 43 | | | | |
| 5/21 | 27.0 | | | | | 6.58 | | | 11.31 | 97 | 8.33 | | | | 43 | | | | |
| 5/21 | 29.0 | 0.3 | 5 | 5.3 | 8.3 | 6.55 | 3.9 | 2.2 | 11.28 | 97 | 8.26 | 25 | 15 | 0.03 | 43 | | | | |
| 6/11 | 0.0 | | | | | | | | | | | | | | | 2 | 0 | 529.63 | 24.6 |
| 6/11 | 1.0 | 0.3 | 5 | 5.2 | 10.4 | 6.80 | 4.1 | 2.1 | 9.63 | 102 | 18.08 | 29 | 18 | 0.03 | 44 | | | | |
| 6/11 | 2.0 | | | | | 6.80 | | | 9.69 | 102 | 17.82 | | | | 44 | | | | |
| 6/11 | 3.0 | | | | | 6.84 | | | 9.84 | 101 | 16.65 | | | | 44 | | | | |
| 6/11 | 4.0 | | | | | 6.85 | | | 9.99 | 101 | 16.11 | | | | 43 | | | | |
| 6/11 | 5.0 | | | | | 6.87 | | | 10.01 | 101 | 15.92 | | | | 43 | | | | |
| 6/11 | 6.0 | | | | | 6.88 | | | 10.08 | 101 | 15.41 | | | | 44 | | | | |
| 6/11 | 7.0 | | | | | 6.93 | | | 10.30 | 101 | 14.59 | | | | 43 | | | | |
| 6/11 | 8.0 | | | | | 6.93 | | | 10.47 | 100 | 13.46 | | | | 44 | | | | |
| 6/11 | 9.0 | | | | | 6.92 | | | 10.58 | 100 | 13.00 | | | | 43 | | | | |
| 6/11 | 10.0 | | | | | 6.91 | | | 10.75 | 100 | 12.23 | | | | 43 | | | | |
| 6/11 | 11.0 | | | | | 6.92 | | | 10.84 | 100 | 11.90 | | | | 43 | | | | |
| 6/11 | 12.0 | | | | | 6.91 | | | 10.88 | 100 | 11.42 | | | | 43 | | | | |
| 6/11 | 13.0 | | | | | 6.90 | | | 10.95 | 99 | 11.15 | | | | 43 | | | | |
| 6/11 | 14.0 | | | | | 6.88 | | | 11.00 | 100 | 10.82 | | | | 43 | | | | |
| 6/11 | 15.0 | | | | | 6.83 | | | 11.00 | 99 | 10.63 | | | | 43 | | | | |
| 6/11 | 16.0 | | | | | 6.82 | | | 11.00 | 99 | 10.41 | | | | 43 | | | | |
| 6/11 | 17.0 | | | | | 6.79 | | | 11.00 | 98 | 10.19 | | | | 43 | | | | |
| 6/11 | 18.0 | | | | | 6.75 | | | 10.97 | 97 | 10.06 | | | | 43 | | | | |
| 6/11 | 19.0 | | | | | 6.72 | | | 10.91 | 97 | 9.77 | | | | 44 | | | | |
| 6/11 | 20.0 | | | | | 6.64 | | | 10.87 | 95 | 9.56 | | | | 44 | | | | |
| 6/11 | 21.0 | | | | | 6.60 | | | 10.77 | 95 | 9.33 | | | | 44 | | | | |
| 6/11 | 22.0 | | | | | 6.54 | | | 10.63 | 92 | 9.11 | | | | 44 | | | | |
| 6/11 | 23.0 | | | | | 6.50 | | | 10.58 | 92 | 9.03 | | | | 44 | | | | |
| 6/11 | 24.0 | | | | | 6.44 | | | 10.47 | 91 | 8.85 | | | | 44 | | | | |
| 6/11 | 25.0 | | | | | 6.42 | | | 10.38 | 90 | 8.77 | | | | 44 | | | | |
| 6/11 | 26.0 | | | | | 6.40 | | | 10.38 | 89 | 8.75 | | | | 44 | | | | |
| 6/11 | 27.0 | 0.3 | 5 | 5.2 | 9.5 | 6.40 | 4.0 | 1.9 | 10.38 | 89 | 8.70 | 29 | 19 | 0.03 | 44 | | | | |
| 6/11 | 28.0 | | | | | 6.38 | | | 10.32 | 89 | 8.53 | | | | 44 | | | | |
| 7/16 | 0.0 | | | | | | | | | | | | | | | 1 | 0 | 528.35 | 24.2 |

QUABBIN LABORATORY RECORDS 1997
(206) SHAFT #12 --- RESERVOIR

| DATE | DEPTH-M | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI | ELEV | INTAKE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07/16 | 1.0 | | | | | 6.73 | | | 8.17 | 96 | 24.24 | | | | 45 | | | | |
| 07/16 | 2.0 | | | | | 6.76 | | | 8.21 | 96 | 24.13 | | | | 45 | | | | |
| 07/16 | 3.0 | | | | | 6.76 | | | 8.16 | 96 | 23.89 | | | | 46 | | | | |
| 07/16 | 4.0 | 0.3 | 5 | 6.9 | 12.3 | 6.81 | 4.1 | 2.3 | 8.35 | 97 | 23.27 | 28 | 16 | 0.03 | 45 | | | | |
| 07/16 | 5.0 | | | | | 6.84 | | | 8.48 | 98 | 23.12 | | | | 45 | | | | |
| 07/16 | 6.0 | | | | | 6.89 | | | 8.70 | 100 | 22.37 | | | | 45 | | | | |
| 07/16 | 7.0 | | | | | 6.91 | | | 8.74 | 99 | 22.08 | | | | 44 | | | | |
| 07/16 | 8.0 | | | | | 6.90 | | | 8.74 | 99 | 21.87 | | | | 44 | | | | |
| 07/16 | 9.0 | | | | | 6.89 | | | 9.67 | 104 | 18.76 | | | | 44 | | | | |
| 07/16 | 10.0 | | | | | 7.01 | | | 10.38 | 105 | 15.80 | | | | 45 | | | | |
| 07/16 | 11.0 | | | | | 7.02 | | | 10.55 | 103 | 14.66 | | | | 45 | | | | |
| 07/16 | 12.0 | | | | | 7.00 | | | 10.53 | 102 | 13.98 | | | | 45 | | | | |
| 07/16 | 13.0 | | | | | 6.98 | | | 10.52 | 101 | 13.43 | | | | 44 | | | | |
| 07/16 | 14.0 | | | | | 6.93 | | | 10.58 | 100 | 12.86 | | | | 44 | | | | |
| 07/16 | 15.0 | | | | | 6.85 | | | 10.45 | 97 | 12.18 | | | | 44 | | | | |
| 07/16 | 16.0 | | | | | 6.77 | | | 10.42 | 97 | 11.77 | | | | 45 | | | | |
| 07/16 | 17.0 | | | | | 6.64 | | | 10.35 | 95 | 11.40 | | | | 45 | | | | |
| 07/16 | 18.0 | | | | | 6.56 | | | 10.20 | 93 | 11.07 | | | | 45 | | | | |
| 07/16 | 19.0 | | | | | 6.50 | | | 10.12 | 92 | 10.76 | | | | 45 | | | | |
| 07/16 | 20.0 | 0.3 | 5 | 6.4 | 10.2 | 6.44 | 4.0 | 2.1 | 9.92 | 89 | 10.60 | 27 | 16 | 0.05 | 45 | | | | |
| 07/16 | 21.0 | | | | | 6.41 | | | 9.87 | 89 | 10.51 | | | | 45 | | | | |
| 07/16 | 22.0 | | | | | 6.37 | | | 9.79 | 88 | 10.34 | | | | 45 | | | | |
| 07/16 | 23.0 | | | | | 6.34 | | | 9.70 | 86 | 10.11 | | | | 45 | | | | |
| 07/16 | 24.0 | | | | | 6.31 | | | 9.60 | 85 | 10.03 | | | | 45 | | | | |
| 07/16 | 25.0 | | | | | 6.32 | | | 9.73 | 86 | 9.93 | | | | 45 | | | | |
| 07/16 | 26.0 | | | | | 6.31 | | | 9.50 | 84 | 9.81 | | | | 45 | | | | |
| 07/16 | 27.0 | | | | | 6.28 | | | 9.55 | 84 | 9.64 | | | | 45 | | | | |
| 08/14 | 0.0 | | | | | | | | | | | | | | | 1 | 0 | 527.00 | 1.8 |
| 08/14 | 1.0 | | | | | 6.65 | | | 8.17 | 94 | 23.23 | | | | 47 | | | | |
| 08/14 | 2.0 | | | | | 6.66 | | | 8.17 | 94 | 23.24 | | | | 47 | | | | |
| 08/14 | 3.0 | | | | | 6.68 | | | 8.12 | 94 | 23.25 | | | | 47 | | | | |
| 08/14 | 4.0 | 0.3 | 5 | 5.4 | 10.2 | 6.69 | 4.1 | 2.0 | 8.12 | 94 | 23.25 | 27 | 15 | 0.04 | 47 | | | | |
| 08/14 | 5.0 | | | | | 6.69 | | | 8.10 | 94 | 23.25 | | | | 47 | | | | |
| 08/14 | 6.0 | | | | | 6.69 | | | 8.10 | 94 | 23.25 | | | | 47 | | | | |
| 08/14 | 7.0 | | | | | 6.70 | | | 8.09 | 93 | 23.23 | | | | 47 | | | | |
| 08/14 | 8.0 | | | | | 6.71 | | | 8.08 | 93 | 23.21 | | | | 47 | | | | |
| 08/14 | 9.0 | | | | | 6.72 | | | 9.10 | 101 | 21.23 | | | | 47 | | | | |
| 08/14 | 10.0 | | | | | 6.80 | | | 10.15 | 106 | 17.75 | | | | 47 | | | | |
| 08/14 | 11.0 | | | | | 6.84 | | | 10.36 | 105 | 16.08 | | | | 47 | | | | |
| 08/14 | 12.0 | | | | | 6.78 | | | 10.48 | 104 | 14.76 | | | | 47 | | | | |
| 08/14 | 13.0 | | | | | 6.78 | | | 10.63 | 103 | 13.80 | | | | 47 | | | | |
| 08/14 | 14.0 | | | | | 6.78 | | | 10.69 | 102 | 13.50 | | | | 47 | | | | |
| 08/14 | 15.0 | | | | | 6.78 | | | 10.70 | 101 | 13.20 | | | | 47 | | | | |
| 08/14 | 16.0 | | | | | 6.78 | | | 10.77 | 101 | 12.56 | | | | 47 | | | | |
| 08/14 | 17.0 | | | | | 6.77 | | | 10.81 | 101 | 11.91 | | | | 46 | | | | |
| 08/14 | 18.0 | | | | | 6.69 | | | 10.69 | 98 | 11.70 | | | | 47 | | | | |
| 08/14 | 19.0 | | | | | 6.53 | | | 10.10 | 93 | 11.38 | | | | 46 | | | | |
| 08/14 | 20.0 | 0.4 | 6 | 5.9 | 10.4 | 6.41 | 4.2 | 2.3 | 9.82 | 89 | 11.10 | 27 | 16 | 0.04 | 47 | | | | |
| 08/14 | 21.0 | | | | | 6.33 | | | 9.50 | 86 | 10.82 | | | | 47 | | | | |
| 08/14 | 22.0 | | | | | 6.25 | | | 9.32 | 84 | 10.60 | | | | 46 | | | | |
| 08/14 | 23.0 | | | | | 6.22 | | | 9.19 | 83 | 10.47 | | | | 47 | | | | |
| 08/14 | 24.0 | | | | | 6.18 | | | 8.93 | 80 | 10.28 | | | | 47 | | | | |
| 08/14 | 25.0 | | | | | 6.13 | | | 8.81 | 78 | 10.10 | | | | 47 | | | | |
| 08/14 | 26.0 | | | | | 6.12 | | | 8.80 | 78 | 10.07 | | | | 47 | | | | |

QUABBIN LABORATORY RECORDS 1997

206) SHAFT #12 — RESERVOIR

| DATE | DEPTH-M | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI | ELEV | INTAKE M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/17 | 0.0 | | | | | | | | | | | | | | | 19 | 0 | 525.62 | 23.3 |
| 9/17 | 1.0 | | | | | 6.68 | | | 8.54 | 95 | 20.90 | | | | 50 | | | | |
| 9/17 | 2.0 | | | | | 6.75 | | | 8.50 | 95 | 20.87 | | | | 51 | | | | |
| 9/17 | 3.0 | | | | | 6.79 | | | 8.47 | 94 | 20.84 | | | | 51 | | | | |
| 9/17 | 4.0 | | | | | 6.84 | | | 8.41 | 94 | 20.83 | | | | 51 | | | | |
| 9/17 | 5.0 | | | | | 6.83 | | | 8.40 | 94 | 20.82 | | | | 50 | | | | |
| 9/17 | 6.0 | 0.3 | 5 | 5.8 | 11.0 | 6.85 | 4.1 | 2.3 | 8.42 | 94 | 20.80 | 25 | 16 | 0.03 | 49 | | | | |
| 9/17 | 7.0 | | | | | 6.84 | | | 8.39 | 94 | 20.70 | | | | 50 | | | | |
| 9/17 | 8.0 | | | | | 6.82 | | | 8.36 | 92 | 20.65 | | | | 50 | | | | |
| 9/17 | 9.0 | | | | | 6.82 | | | 8.31 | 92 | 20.59 | | | | 50 | | | | |
| 9/17 | 10.0 | | | | | 6.79 | | | 8.29 | 92 | 20.54 | | | | 50 | | | | |
| 9/17 | 11.0 | | | | | 6.78 | | | 8.33 | 92 | 20.44 | | | | 49 | | | | |
| 9/17 | 12.0 | | | | | 6.76 | | | 8.45 | 93 | 20.02 | | | | 49 | | | | |
| 9/17 | 13.0 | | | | | 6.74 | | | 9.66 | 101 | 17.65 | | | | 49 | | | | |
| 9/17 | 14.0 | | | | | 6.63 | | | 9.76 | 97 | 15.21 | | | | 49 | | | | |
| 9/17 | 15.0 | | | | | 6.50 | | | 9.59 | 93 | 14.00 | | | | 50 | | | | |
| 9/17 | 16.0 | | | | | 6.40 | | | 9.28 | 88 | 13.25 | | | | 49 | | | | |
| 9/17 | 17.0 | | | | | 6.34 | | | 9.11 | 86 | 12.89 | | | | 48 | | | | |
| 9/17 | 18.0 | | | | | 6.29 | | | 9.02 | 85 | 12.45 | | | | 49 | | | | |
| 9/17 | 19.0 | | | | | 6.25 | | | 8.98 | 83 | 12.08 | | | | 49 | | | | |
| 9/17 | 20.0 | | | | | 6.22 | | | 8.93 | 83 | 11.97 | | | | 48 | | | | |
| 9/17 | 21.0 | 0.4 | 5 | 6.0 | 11.3 | 6.20 | 4.2 | 2.5 | 8.75 | 80 | 11.53 | 26 | 17 | 0.05 | 49 | | | | |
| 9/17 | 22.0 | | | | | 6.16 | | | 8.67 | 80 | 11.46 | | | | 49 | | | | |
| 9/17 | 23.0 | | | | | 6.14 | | | 8.40 | 76 | 11.20 | | | | 49 | | | | |
| 9/17 | 24.0 | | | | | 6.10 | | | 8.20 | 75 | 10.89 | | | | 49 | | | | |
| 9/17 | 25.0 | | | | | 6.08 | | | 7.96 | 72 | 10.72 | | | | 49 | | | | |
| 9/17 | 26.0 | | | | | 6.07 | | | 7.76 | 70 | 10.53 | | | | 49 | | | | |
| 10/22 | 0.0 | | | | | | | | | | | | | | | 17 | 0 | 523.83 | 22.8 |
| 10/22 | 0.5 | 0.3 | 5 | 6.4 | 8.6 | 6.52 | 4.4 | 2.8 | 9.20 | 90 | 14.36 | 23 | 17 | 0.05 | 46 | | | | |
| 10/22 | 3.0 | | | | | 6.49 | | | 9.20 | 90 | 14.36 | | | | 45 | | | | |
| 10/22 | 6.0 | | | | | 6.50 | | | 9.15 | 90 | 14.38 | | | | 45 | | | | |
| 10/22 | 9.0 | | | | | 6.49 | | | 9.15 | 90 | 14.38 | | | | 44 | | | | |
| 10/22 | 12.0 | | | | | 6.49 | | | 9.12 | 89 | 14.38 | | | | 45 | | | | |
| 10/22 | 15.0 | | | | | 6.49 | | | 9.09 | 89 | 14.38 | | | | 45 | | | | |
| 10/22 | 18.0 | | | | | 6.48 | | | 9.09 | 89 | 14.37 | | | | 44 | | | | |
| 10/22 | 21.0 | | | | | 6.42 | | | 8.90 | 86 | 14.24 | | | | 45 | | | | |
| 10/22 | 24.0 | | | | | 5.94 | | | 7.00 | 64 | 11.60 | | | | 45 | | | | |
| 10/22 | 26.0 | 0.6 | 7 | 6.4 | 10.2 | 5.87 | 4.4 | 2.8 | 6.75 | 62 | 11.41 | 23 | 18 | 0.17 | 45 | | | | |
| 10/22 | 27.0 | | | | | 5.85 | | | 6.60 | 61 | 11.26 | | | | 45 | | | | |
| 11/19 | 0.0 | | | | | | | | | | | | | | | 6 | 0 | 523.57 | 22.7 |
| 11/19 | 0.5 | 0.3 | 5 | 6.5 | 7.9 | 6.75 | 4.2 | 2.8 | 10.41 | 89 | 8.73 | 26 | 15 | 0.06 | 44 | | | | |
| 11/19 | 3.0 | | | | | 6.72 | | | 10.36 | 89 | 8.74 | | | | 44 | | | | |
| 11/19 | 6.0 | | | | | 6.70 | | | 10.34 | 89 | 8.73 | | | | 44 | | | | |
| 11/19 | 9.0 | | | | | 6.68 | | | 10.30 | 88 | 8.71 | | | | 44 | | | | |
| 11/19 | 12.0 | | | | | 6.68 | | | 10.28 | 88 | 8.68 | | | | 44 | | | | |
| 11/19 | 15.0 | | | | | 6.68 | | | 10.24 | 88 | 8.67 | | | | 44 | | | | |
| 11/19 | 18.0 | | | | | 6.67 | | | 10.26 | 88 | 8.62 | | | | 44 | | | | |
| 11/19 | 21.0 | | | | | 6.67 | | | 10.23 | 88 | 8.60 | | | | 44 | | | | |
| 11/19 | 24.0 | | | | | 6.66 | | | 10.24 | 88 | 8.60 | | | | 44 | | | | |
| 11/19 | 26.0 | 0.3 | 5 | 6.7 | 8.1 | 6.66 | 4.1 | 2.5 | 10.20 | 88 | 8.59 | 25 | 15 | 0.05 | 44 | | | | |
| 11/19 | 27.0 | | | | | 6.66 | | | 10.20 | 88 | 8.59 | | | | 44 | | | | |
| | AVG. | 0.3 | 5 | 6.0 | 9.7 | 6.62 | 4.2 | 2.4 | 9.90 | 93 | 13.07 | 26 | 16 | 0.05 | 46 | 6 | 0 | | |
| | MAX. | 0.6 | 7 | 6.9 | 12.3 | 7.02 | 4.5 | 2.8 | 12.85 | 106 | 24.24 | 29 | 19 | 0.17 | 51 | 19 | 0 | | |
| | MIN. | 0.3 | 5 | 5.2 | 8.0 | 6.38 | 3.9 | 1.9 | 8.16 | 89 | 4.36 | 23 | 13 | 0.03 | 42 | 1 | 0 | | |

QUABBIN LABORATORY RECORDS 1997
DEN HILL — RESERVOIR

| DATE | DEPTH-M | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI | ELEV | INTAK A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 04/16 | 0.0 | | | | | | | | 12.32 | 102 | 7.06 | | | | 48 | 2 | 0 | 530.35 | |
| 04/16 | 0.5 | 0.3 | 10 | 7.4 | 10.5 | 6.60 | 4.6 | 2.6 | 12.26 | 101 | 7.02 | 28 | 16 | 0.06 | 49 | | | | |
| 04/16 | 3.0 | | | | | | | | 12.30 | 101 | 6.66 | | | | 49 | | | | |
| 04/16 | 6.0 | | | | | | | | 12.27 | 100 | 6.27 | | | | 48 | | | | |
| 04/16 | 9.0 | | | | | | | | 12.20 | 98 | 6.00 | | | | 48 | | | | |
| 04/16 | 12.0 | | | | | | | | 12.13 | 98 | 5.91 | | | | 48 | | | | |
| 04/16 | 15.0 | | | | | | | | 12.18 | 97 | 5.71 | | | | 48 | | | | |
| 04/16 | 16.0 | 0.3 | 10 | 7.3 | 9.8 | 6.52 | 4.4 | 2.4 | 12.15 | 96 | 5.56 | 27 | 16 | 0.06 | 48 | | | | |
| 05/21 | 0.0 | | | | | | | | | | | | | | | 5 | 0 | 530.14 | |
| 05/21 | 0.5 | 0.3 | 8 | 6.3 | 9.8 | 6.66 | 4.5 | 2.8 | 10.49 | 97 | 12.15 | 28 | 16 | 0.05 | 45 | | | | |
| 05/21 | 3.0 | | | | | 6.62 | | | 10.47 | 97 | 12.10 | | | | 45 | | | | |
| 05/21 | 6.0 | | | | | 6.59 | | | 10.47 | 97 | 11.80 | | | | 44 | | | | |
| 05/21 | 9.0 | | | | | 6.53 | | | 10.50 | 94 | 10.69 | | | | 45 | | | | |
| 05/21 | 12.0 | | | | | 6.50 | | | 10.50 | 94 | 10.38 | | | | 44 | | | | |
| 05/21 | 15.0 | | | | | 6.45 | | | 10.42 | 92 | 9.97 | | | | 45 | | | | |
| 05/21 | 18.0 | 0.3 | 10 | 6.3 | 9.3 | 6.34 | 3.9 | 2.0 | 10.28 | 90 | 9.47 | 28 | 17 | 0.05 | 45 | | | | |
| 06/11 | 0.0 | | | | | | | | | | | | | | | 4 | 0 | 529.63 | |
| 06/11 | 1.0 | 0.3 | 7 | 6.0 | 10.8 | 6.69 | 4.3 | 2.2 | 9.26 | 101 | 20.18 | 32 | 19 | 0.05 | 44 | | | | |
| 06/11 | 2.0 | | | | | 6.79 | | | 9.44 | 100 | 18.37 | | | | 44 | | | | |
| 06/11 | 3.0 | | | | | 6.88 | | | 9.76 | 101 | 17.15 | | | | 44 | | | | |
| 06/11 | 4.0 | | | | | 6.94 | | | 10.12 | 101 | 15.49 | | | | 44 | | | | |
| 06/11 | 5.0 | | | | | 6.95 | | | 10.36 | 101 | 14.35 | | | | 44 | | | | |
| 06/11 | 6.0 | | | | | 6.90 | | | 10.34 | 99 | 13.55 | | | | 44 | | | | |
| 06/11 | 7.0 | | | | | 6.84 | | | 10.27 | 98 | 13.28 | | | | 44 | | | | |
| 06/11 | 8.0 | | | | | 6.74 | | | 10.17 | 95 | 12.52 | | | | 44 | | | | |
| 06/11 | 9.0 | | | | | 6.64 | | | 10.01 | 93 | 12.15 | | | | 44 | | | | |
| 06/11 | 10.0 | | | | | 6.59 | | | 10.03 | 92 | 11.64 | | | | 44 | | | | |
| 06/11 | 11.0 | | | | | 6.50 | | | 9.89 | 91 | 11.44 | | | | 44 | | | | |
| 06/11 | 12.0 | | | | | 6.46 | | | 9.73 | 88 | 11.19 | | | | 45 | | | | |
| 06/11 | 13.0 | | | | | 6.38 | | | 9.60 | 87 | 10.89 | | | | 45 | | | | |
| 06/11 | 14.0 | | | | | 6.33 | | | 9.44 | 86 | 10.81 | | | | 44 | | | | |
| 06/11 | 15.0 | | | | | 6.30 | | | 9.28 | 83 | 10.70 | | | | 45 | | | | |
| 06/11 | 16.0 | | | | | 6.29 | | | 9.28 | 83 | 10.56 | | | | 44 | | | | |
| 06/11 | 17.0 | | | | | 6.23 | | | 8.96 | 80 | 10.25 | | | | 45 | | | | |
| 06/11 | 18.0 | | | | | 6.22 | | | 8.93 | 79 | 10.12 | | | | 45 | | | | |
| 06/11 | 19.0 | 0.3 | 8 | 6.1 | 12.0 | 6.17 | 4.3 | 2.3 | 8.72 | 77 | 9.94 | 31 | 20 | 0.05 | 45 | | | | |
| 06/11 | 20.0 | | | | | 6.12 | | | 8.21 | 72 | 9.60 | | | | 45 | | | | |
| 07/16 | 0.0 | | | | | | | | | | | | | | | 1 | 0 | 528.35 | |
| 07/16 | 1.0 | | | | | 6.75 | | | 7.84 | 94 | 25.71 | | | | 45 | | | | |
| 07/16 | 2.0 | | | | | 6.78 | | | 7.85 | 95 | 25.50 | | | | 45 | | | | |
| 07/16 | 3.0 | 0.3 | 7 | 7.0 | 10.4 | 6.80 | 4.7 | 3.2 | 7.84 | 94 | 25.43 | 28 | 15 | 0.05 | 45 | | | | |
| 07/16 | 4.0 | | | | | 6.83 | | | 8.25 | 97 | 24.00 | | | | 44 | | | | |
| 07/16 | 5.0 | | | | | 6.73 | | | 8.23 | 96 | 23.44 | | | | 45 | | | | |
| 07/16 | 6.0 | | | | | 6.77 | | | 8.42 | 96 | 22.66 | | | | 44 | | | | |
| 07/16 | 7.0 | | | | | 6.78 | | | 9.08 | 101 | 21.24 | | | | 45 | | | | |
| 07/16 | 8.0 | | | | | 6.68 | | | 9.54 | 102 | 18.70 | | | | 45 | | | | |
| 07/16 | 9.0 | | | | | 6.62 | | | 9.65 | 100 | 17.09 | | | | 45 | | | | |
| 07/16 | 10.0 | | | | | 6.68 | | | 9.85 | 98 | 15.36 | | | | 45 | | | | |
| 07/16 | 11.0 | | | | | 6.73 | | | 9.99 | 97 | 14.07 | | | | 45 | | | | |
| 07/16 | 12.0 | | | | | 6.36 | | | 8.82 | 85 | 13.26 | | | | 46 | | | | |
| 07/16 | 13.0 | | | | | 6.23 | | | 8.34 | 78 | 12.59 | | | | 46 | | | | |
| 07/16 | 14.0 | | | | | 6.10 | | | 7.58 | 70 | 11.71 | | | | 46 | | | | |
| 07/16 | 15.0 | | | | | 6.07 | | | 7.30 | 67 | 11.33 | | | | 46 | | | | |
| 07/16 | 16.0 | | | | | 6.07 | | | 7.10 | 65 | 11.11 | | | | 46 | | | | |
| 07/16 | 17.0 | 0.3 | 8 | 6.6 | 11.0 | 6.01 | 4.4 | 2.6 | 6.63 | 60 | 10.76 | 30 | 19 | 0.06 | 47 | | | | |
| 07/16 | 18.0 | | | | | 6.00 | | | 6.56 | 59 | 10.53 | | | | 47 | | | | |
| 07/16 | 19.0 | | | | | 5.94 | | | 5.58 | 50 | 10.39 | | | | 48 | | | | |
| 08/14 | 0.0 | | | | | | | | | | | | | | | 3 | 0 | 527.00 | |
| 08/14 | 1.0 | | | | | 6.63 | | | 8.04 | 94 | 24.08 | | | | 48 | | | | |

QUABBIN LABORATORY RECORDS 1997
DEN HILL --- RESERVOIR

| DATE | DEPTH-M | TURB | COLOR | CHLO | HARD | pH | STDALK | EPAALK | DOPPM | DOSAT | TEMPC | RESTOT | RESFIX | Fe | SPCOND | TOTCOLI | FECCOLI | ELEV | INTAKE M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 08/14 | 2.0 | | | | | 6.66 | | | 8.03 | 94 | 24.03 | | | | 48 | | | | |
| 08/14 | 3.0 | | | | | 6.67 | | | 8.01 | 94 | 23.97 | | | | 48 | | | | |
| 08/14 | 4.0 | | | | | 6.70 | | | 8.00 | 94 | 23.97 | | | | 48 | | | | |
| 08/14 | 5.0 | 0.3 | 5 | 5.6 | 11.0 | 6.70 | 4.1 | 2.6 | 8.00 | 94 | 23.80 | 28 | 18 | 0.06 | 47 | | | | |
| 08/14 | 6.0 | | | | | 6.68 | | | 8.05 | 94 | 23.64 | | | | 47 | | | | |
| 08/14 | 7.0 | | | | | 6.68 | | | 8.03 | 94 | 23.62 | | | | 47 | | | | |
| 08/14 | 8.0 | | | | | 6.62 | | | 7.97 | 93 | 23.42 | | | | 47 | | | | |
| 08/14 | 9.0 | | | | | 6.57 | | | 8.19 | 94 | 22.71 | | | | 46 | | | | |
| 08/14 | 10.0 | | | | | 6.56 | | | 8.69 | 98 | 21.34 | | | | 47 | | | | |
| 08/14 | 11.0 | | | | | 6.58 | | | 9.56 | 103 | 18.77 | | | | 47 | | | | |
| 08/14 | 12.0 | | | | | 6.88 | | | 10.33 | 106 | 16.39 | | | | 46 | | | | |
| 08/14 | 13.0 | | | | | 6.90 | | | 10.22 | 101 | 14.99 | | | | 46 | | | | |
| 08/14 | 14.0 | | | | | 6.60 | | | 8.20 | 79 | 13.75 | | | | 47 | | | | |
| 08/14 | 15.0 | | | | | 6.05 | | | 5.33 | 50 | 12.40 | | | | 49 | | | | |
| 08/14 | 16.0 | | | | | 5.96 | | | 5.06 | 47 | 11.67 | | | | 49 | | | | |
| 08/14 | 17.0 | 0.6 | 8 | 6.2 | 9.7 | 5.90 | 4.3 | 2.7 | 4.70 | 43 | 11.12 | 30 | 20 | 0.12 | 48 | | | | |
| 08/14 | 18.0 | | | | | 5.88 | | | 4.24 | 38 | 10.64 | | | | 49 | | | | |
| 08/14 | 19.0 | | | | | 5.85 | | | 4.07 | 37 | 10.26 | | | | 49 | | | | |
| 09/17 | 0.0 | | | | | | | | | | | | | | | 5 | 0 | 525.62 | |
| 09/17 | 1.0 | | | | | 6.61 | | | 8.29 | 94 | 21.95 | | | | 51 | | | | |
| 09/17 | 2.0 | | | | | 6.67 | | | 8.29 | 93 | 21.65 | | | | 50 | | | | |
| 09/17 | 3.0 | | | | | 6.70 | | | 8.30 | 93 | 21.48 | | | | 50 | | | | |
| 09/17 | 4.0 | | | | | 6.75 | | | 8.30 | 93 | 21.42 | | | | 50 | | | | |
| 09/17 | 5.0 | | | | | 6.75 | | | 8.26 | 93 | 21.38 | | | | 50 | | | | |
| 09/17 | 6.0 | 0.3 | 5 | 6.4 | 12.3 | 6.76 | 4.2 | 2.4 | 8.25 | 93 | 21.38 | 26 | 15 | 0.06 | 50 | | | | |
| 09/17 | 7.0 | | | | | 6.77 | | | 8.21 | 92 | 21.36 | | | | 49 | | | | |
| 09/17 | 8.0 | | | | | 6.74 | | | 8.16 | 91 | 21.22 | | | | 49 | | | | |
| 09/17 | 9.0 | | | | | 6.72 | | | 8.03 | 90 | 21.08 | | | | 50 | | | | |
| 09/17 | 10.0 | | | | | 6.61 | | | 7.87 | 87 | 20.75 | | | | 50 | | | | |
| 09/17 | 11.0 | | | | | 6.50 | | | 7.66 | 85 | 20.41 | | | | 49 | | | | |
| 09/17 | 12.0 | | | | | 6.25 | | | 7.19 | 77 | 18.77 | | | | 50 | | | | |
| 09/17 | 13.0 | | | | | 6.08 | | | 6.67 | 67 | 15.38 | | | | 50 | | | | |
| 09/17 | 14.0 | | | | | 5.99 | | | 5.78 | 56 | 14.02 | | | | 50 | | | | |
| 09/17 | 15.0 | | | | | 5.92 | | | 4.10 | 39 | 12.58 | | | | 50 | | | | |
| 09/17 | 16.0 | | | | | 5.88 | | | 4.04 | 38 | 11.84 | | | | 51 | | | | |
| 09/17 | 17.0 | 0.5 | 10 | 6.3 | 10.6 | 5.85 | 4.6 | 3.0 | 3.00 | 28 | 11.15 | 28 | 19 | 0.13 | 51 | | | | |
| 09/17 | 18.0 | | | | | 5.86 | | | 2.19 | 20 | 10.73 | | | | 52 | | | | |
| 10/22 | 0.0 | | | | | | | | | | | | | | | 6 | 0 | 523.83 | |
| 10/22 | 0.5 | 0.4 | 5 | 6.7 | 8.9 | 6.45 | 4.2 | 2.5 | 9.01 | 87 | 14.21 | 24 | 16 | 0.12 | 46 | | | | |
| 10/22 | 3.0 | | | | | 6.45 | | | 9.00 | 87 | 14.21 | | | | 46 | | | | |
| 10/22 | 6.0 | | | | | 6.45 | | | 9.00 | 87 | 14.21 | | | | 46 | | | | |
| 10/22 | 9.0 | | | | | 6.45 | | | 8.99 | 87 | 14.20 | | | | 46 | | | | |
| 10/22 | 12.0 | | | | | 6.46 | | | 8.97 | 87 | 14.16 | | | | 46 | | | | |
| 10/22 | 15.0 | 0.4 | 5 | 6.8 | 12.0 | 6.45 | 4.2 | 2.5 | 8.87 | 86 | 14.00 | 24 | 17 | 0.13 | 44 | | | | |
| 10/22 | 16.0 | | | | | 6.37 | | | 8.43 | 82 | 13.84 | | | | 45 | | | | |
| 11/19 | 0.0 | | | | | | | | | | | | | | | 3 | 0 | 523.57 | |
| 11/19 | 0.5 | 0.4 | 8 | 6.9 | 8.0 | 6.77 | 4.1 | 2.7 | 10.65 | 89 | 7.45 | 26 | 15 | 0.13 | 46 | | | | |
| 11/19 | 3.0 | | | | | 6.70 | | | 10.58 | 89 | 7.41 | | | | 44 | | | | |
| 11/19 | 6.0 | | | | | 6.68 | | | 10.54 | 88 | 7.32 | | | | 44 | | | | |
| 11/19 | 9.0 | | | | | 6.66 | | | 10.52 | 88 | 7.28 | | | | 44 | | | | |
| 11/19 | 12.0 | | | | | 6.65 | | | 10.52 | 87 | 7.17 | | | | 44 | | | | |
| 11/19 | 15.0 | | | | | 6.65 | | | 10.53 | 87 | 7.04 | | | | 44 | | | | |
| 11/19 | 17.0 | 0.4 | 8 | 6.8 | 8.3 | 6.66 | 4.0 | 2.6 | 10.52 | 87 | 6.89 | 27 | 16 | 0.15 | 45 | | | | |
| 11/19 | 18.0 | | | | | 6.65 | | | 10.53 | 87 | 6.88 | | | | 45 | | | | |
| | AVG. | 0.4 | 8 | 6.5 | 10.3 | 6.50 | 4.3 | 2.6 | 8.77 | 85 | 14.58 | 28 | 17 | 0.08 | 47 | 4 | 0 | | |
| | MAX. | 0.6 | 10 | 7.4 | 12.3 | 6.95 | 4.7 | 3.2 | 12.32 | 106 | 25.71 | 32 | 20 | 0.15 | 52 | 6 | 0 | | |
| | MIN. | 0.3 | 5 | 5.6 | 8.0 | 5.85 | 3.9 | 2.0 | 2.19 | 20 | 5.56 | 24 | 15 | 0.05 | 44 | 1 | 0 | | |

# APPENDIX B

# MISCELLANEOUS

# TABLE 4
# RESERVOIR FACTS AND FIGURES - 1997

Maximum Reservoir Elevation: 530.44 ft - April 8th
Minimum Reservoir Elevation: 523.09 ft - December 31st

Number of Days Flows Discharged Over the Spillway: 203 days; January 1 - July 22

Ware River Diversions to Quabbin: None

Average Daily Flow Entering CVA: 8.72 MGD

Average Daily Flow Entering Shaft 12: 225 MGD (197 days in which water was released to Wachusett Reservoir; June 9 thru December 9 & December 19 thru 31)

Annual Snowfall on Quabbin Watershed (Admin. Bldg. Sampler): 52.25 inches
Average Seasonal Snowfall (Admin. Bldg. Sampler November-April): 48.21 inches
Annual Precipitation on Quabbin Watershed (Admin. Bldg. Sampler): 43.80 inches
Mean Rainfall Event (1990-95 Admin Bldg records): 0.40 inches
Mean Annual Precipitation Enfield/Admin. Bldg. records 1929-97: 46.27 inches

Reservoir Ice Cover:

Winsor Dam Iced Over: February 7th (patchy, thin cover)
Entire Reservoir Opened Up: February 19th

To: Bob Bishop@EQ@MDC Quabbin
Cc: Scott Campbell@EQ@MDC Quabbin
Bcc:
From: Peter Deslauriers@EQ@MDC Quabbin
Subject: Gates Brook
Date: Wednesday, December 31, 1997 10:08:24 EST
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

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Bob,

Fecal coliform results for the Gates Brook sample collected on 12/15/97 were 81 colonies per 100 ml. At your request I collected a repeat sample and did a stream survey on 12/19/97. I throughly inspected the streambed for approximately one half mile upstream of the sample site. At this time there was no evidence of any animal or human fecal contamination. The repeat sample was much lower with only 20 colonies per 100 ml.

I collected another sample on 12/22/97 and obtained 13 Fecals per 100 ml.

On the 12/29/97 Quabbin Run results were 7 Fecals per 100 ml.

It appears that the Gates Brook site has been within its normal range since 12/19/97. The next scheduled collection date is 1/12/97.

Pd

Location WB Swift Date 9/26/97

Project / Client Stream Survey / SAC

Cool, 55-60°, ~~mos~~ cloudy 10AM

Cooleyville Rd. Drive By:

| PASTURE # | ACTIVITY |
|---|---|
| *1 | Possibly logging - Small pile of logs stacked neatly beside house (recently cut). Small cart trail behind house heavily worn and churned up due to vehicle traffic. |
| 2&3 | Tree Nursery - Spruce & fir (Christmas trees). No indication of manure application. Some ditching channelizing of runoff in fields. |
| *4 | Not visible from road - Stopped at no trespassing sign. |

* NOT VISIBLE FROM ROAD



Location WB Swift Date 9/26/97

Project / Client cont.

X-ING ON COOLEYVILLE RD

- (3) STONE FIRE PITS ACTIVELY BEING USED.
- BEAVER DAM N OF ROAD BREECHED STAND H2O. STREAMBED ALMOST DRY
- BEAVER LODGE & DAM S OF RD - APPEARED TO BE ABANDONED - DEAD WOOD, NO KNAWING.
- SOUTH OF ROADWAY, ON WESTERNMOST BRANCH BEAVER ACTIVELY DAMMING - GREEN TWIGS + STONES

SMALL EAST BRANCH

- BROWN HOUSE, E OF BROOK (N-S FLOW) NO AG, >400FT SETBACK GARAGE DOOR IS RED.
- BROWN - CEDAR SIDING GLASS, CERAMIC DEBRIS SCATTERED ON BANK - SMALL AMOUNT - OLD FARM DUMP. 2ND FARM DUMP WEST OF BEAVER POND.
- GOOD BABBLE TO BROOK - MOSTLY COBBLE & GRAVEL BOTTOM - 10 FT WIDE

<OVER>

50

Location WB SWIFT Date 9/26/97

Project / Client cont.

cont...

SMALL EAST BRANCH

- ABANDONED BEAVER POND NOW DORMANT. NATURAL GRAPE VINES - BEAR OR MOOSE DROPPINGS BASED ON SIZE OF WASTE PILE
- PHOTO TAKEN OF BROWN (DARK) ALGAE.

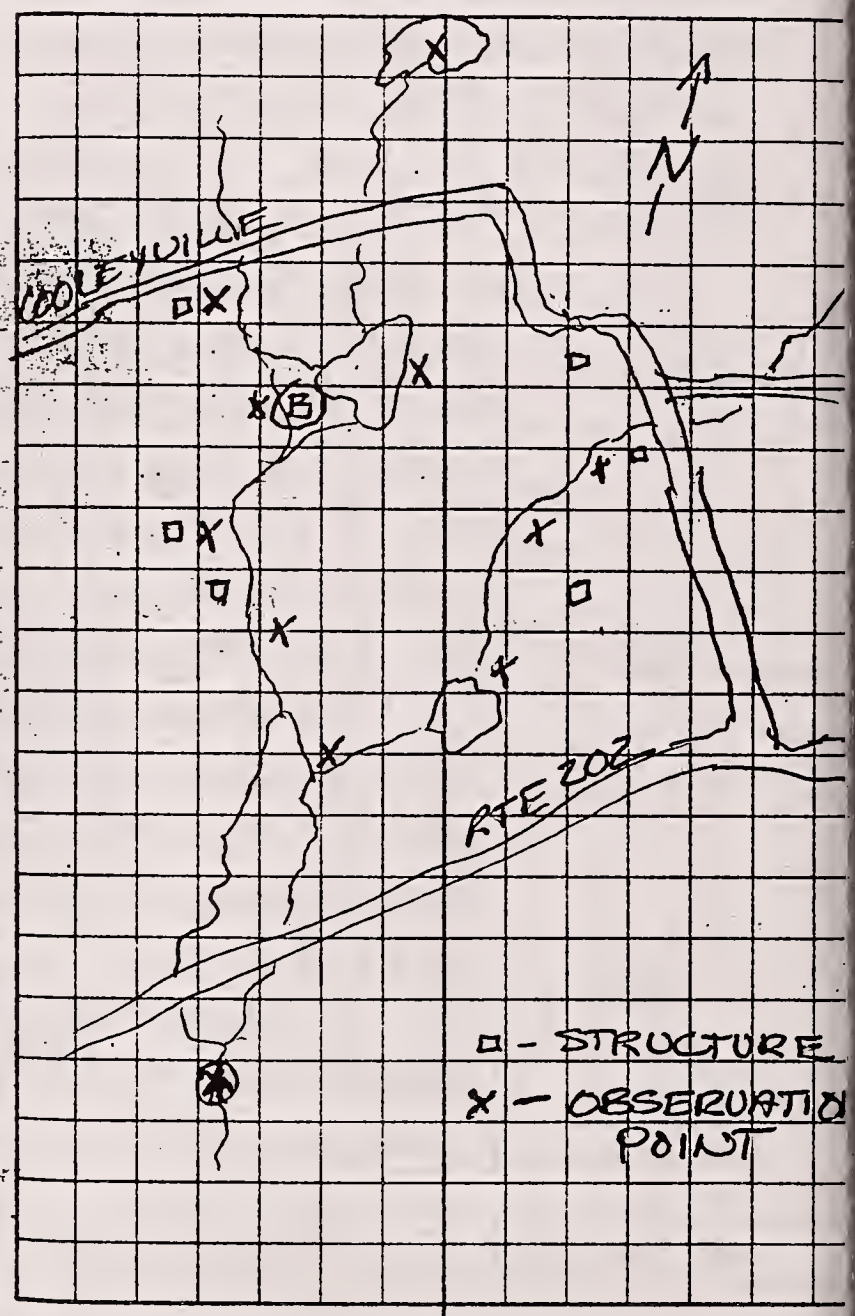
MAIN BRANCH

- SERIES OF JUNKED CARS + WASHED OUT BRIDGE CROSSINGS.
- STREAM 20-25 FT WIDE, STEADY FLOW, TEA COLOR.
- STRUCTURE SHOWN ON USGS MAP, CLOSEST TO BROOK LOOKS RUN DOWN & ABANDONED - OLD SHED OR BARN? NOT VISIBLE. RED HOUSE NORTH OF STRUCTURE OCCUPIED - NO AG, NO APPARENT PROB.

CONCLUSION: BACTI LEVELS REFLECT BEAVER

Location WB SWIFT Date 9/26/97

Project / Client cont.



# MEMO

o: Robert Bishop
rom: Scott Campbell SAC
ubject: **Hop Brook - Stream Survey**
ate: October 1, 1997

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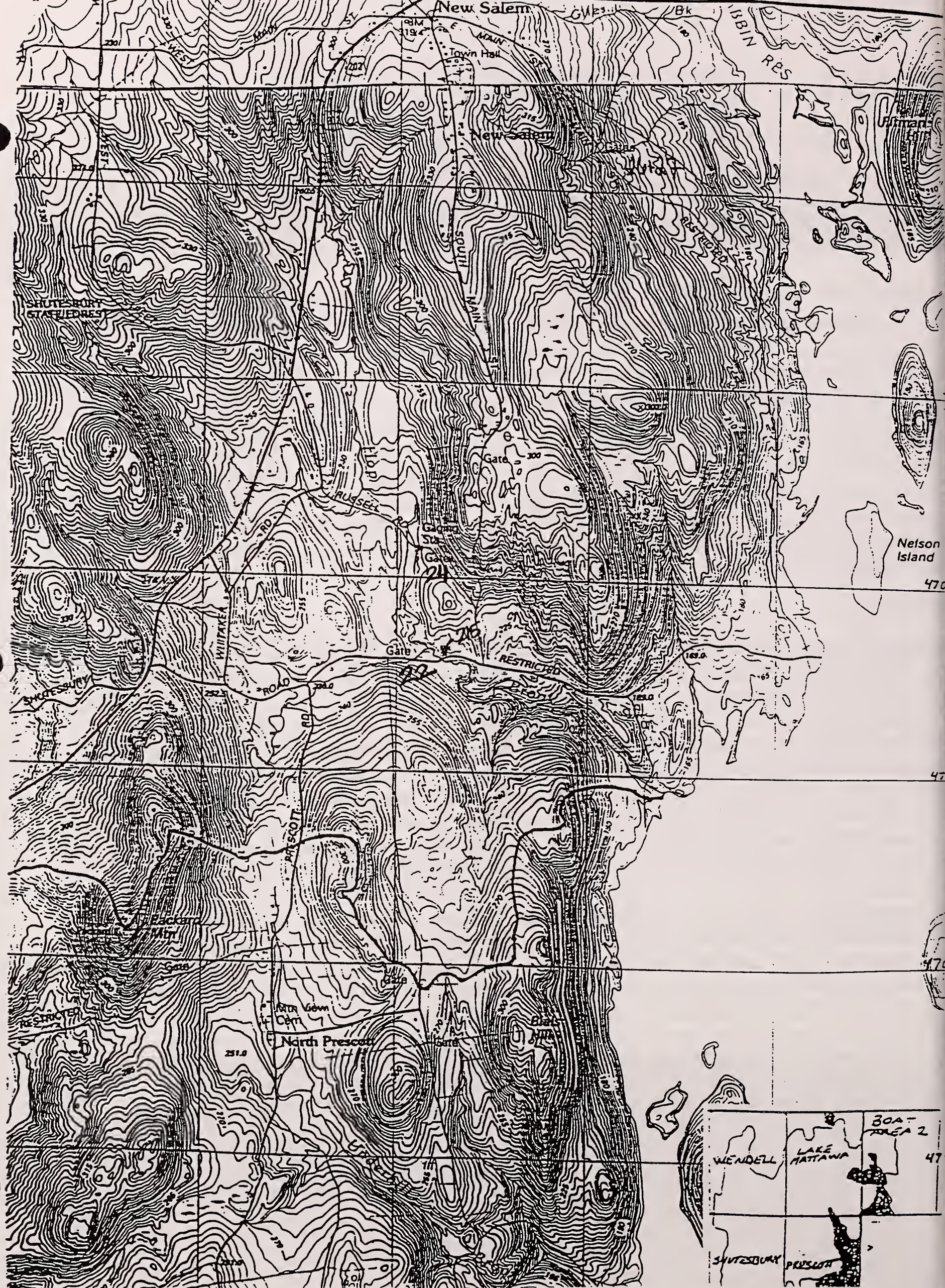
n July 16, 1997 a stream survey was conducted on the Hop Brook drainage basin upstream of the 215 sample te, covering those portions downstream of the beaver impoundment adjacent to North Prescott Road (referred as "Cramer's Pond") and downstream of the brook's crossing at Gate 24 (see map). The survey was rompted following a fecal coliform count of 170 colonies/100ml detected in a routine water sample collected on ıly 14, 1997. The stream survey entailed walking MDC property along the banks of the river south of the rook's crossings at Gates 24 and 22. In addition, land use information was gathered via a drive-by of the ontributing watershed basin surrounding Whitaker Road. Initial findings suggest that active beaver in the cinity of Cramer's Pond, within ½ mile north of the 215 sample site are linked to the elevated bacteria levels. ollow-up bacteria sampling conducted on July 28 support this conclusion as bacteria levels in the small brook aving Cramer's Pond were found to be exceptionally high at 880 colonies/100ml. However, it is not known if e phenomena driving the excessive growth of iron bacteria found in the vicinty of beaver activity is also driving rowth of coliform bacteria.

**ield Survey**

nmediately upstream of the routine sample site, the stream splits into two branches, one heading north towards ate 24 and a second heading in a westerly direction towards Cramer's Pond. MDC lands in the lower portion f the river were surveyed on foot for signs of resident wildlife or recreational activity that may be contributing the bacteria loads in the stream. Beaver dams and lodges that have historically been active on the northern ranch have either been washed out or remain dormant. Below the convergence of the two branches and nmediately upstream of the sample site, no evidence such as knawing, dam building, etc.. was found suggesting eaver activity. Evidence found to implicate recreational activities as a possible source included one set of horse acks and manure inside of Gate 22 and a small pile of soiled napkins left on the ground beside the gate. Since e extent of illegal recreational activity occurring within this stream reach is relatively minor and wildlife inputs re absent, it is believed that the source of fecal contamination did not emanate from this branch.

he western branch emanates from a grouping of large, privately held parcels that at one time sustained active rms instead of the now dormant pastures. From the roadway, beaver activity (lodge and damming) could be bserved in the wooded area south of Prescott Road. Based upon the level of ponded water (highest that I have bserved) in what was once a dry meadow adjacent to Cramer's Pond, beaver are also damming north of rescott Road. Water flowing from Cramer's Pond and crossing the culvert on Prescott Road contained a rich at of what is presumably iron bacteria (orange in color, slime-like algae) attached to the streambed and bank. he orange colored flow could be seen as far as the eye could see downstream onto private property. Color in e brook resembled a black/brown shade as it crossed onto MDC property a 1/4 mile downstream. Explosions f iron bacteria have been observed in the past at this same location, most recently during a September 21, 1994 eld survey conducted by MDC staff in response to elevated bacteria levels. While there is no explanation rovided for the excessive growth of iron bacteria, results from the survey conclude that beaver activity is the ource of fecal contamination.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